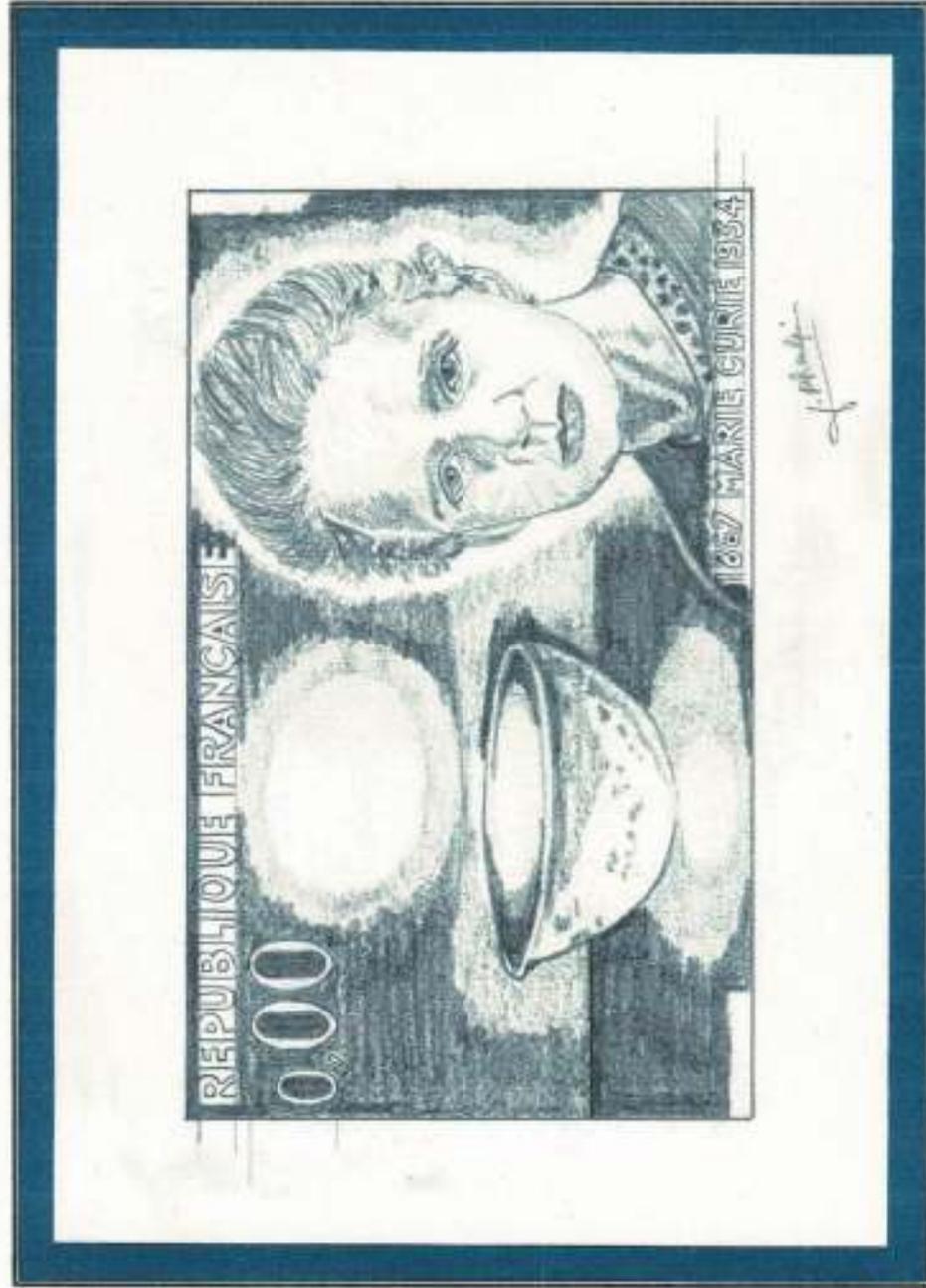


# Fight against cancer through the years

According to WHO there were at least 17 million new cancers and 9 million cancer deaths in 2018 worldwide



One of the original preliminary artworks of Marie Curie, inventor of radiotherapy of cancer, for stamp of France released in 1967 and signed by the artist Jean Pheulphin



Contents of the exhibit	
<b>I. Historical views about cancer.</b>	3
1.1. First description of a malignant tumour is traced up to 3000 B.C. in Egypt	4
1.2. The cancer word originates from the Greek mythology	5
1.3. Up to 16 <sup>th</sup> hundred the origin of cancer was quite unknown for the people	6-10
<b>II. Step by step we know more about cancer</b>	11
2.1. Natural science improved knowledge about cancer	12-15
2.2. Only a small number of cancers are inherited	16-18
<b>III. We have to realize and avoid risks of getting cancer</b>	19-21
3.1. Smoking is the major cause of cancer	22-25
3.2. Alcohol beverages are carcinogenic	26-28
3.3. Radiation are known causes of cancer	29-30
3.4. Working and environmental conditions may cause carcinogens	31
3.5. Infectious agents such as virus, bacteria and parasite may be carcinogenic	32-33
3.6. There exist hormone dependent cancers	34
3.7. Overweight is risk of cancer	35-38
3.8. Unknown issues about the origin of cancer	39-40
<b>IV. Cancer must be diagnosed before treatment</b>	41-44
4.1. We have to pay attention to symptoms of cancer	45-46
4.2. Cancer screening helps to detect cancer in the uterine cervix and breast	47-50
4.3. Cancer needs a microscopic diagnosis and staging	51-53
<b>V. Many disciplines are involved in treatment of cancer</b>	54-57
5.1. Surgery removes cancer	58-60
5.2. Radiotherapy kills cancer	61
5.3. Pharmacological treatment kills cancer cells	62-65
5.4. Childhood cancer needs a special competence	66
5.5. "Tailor-made treatment"	67
5.6. What's new in cancer treatment ?	68-70
5.7. Third sector has an utmost importance in recovering phase of the cancer patients	71-72
5.8. Alternative medicine (acupuncture) does not suit for cancer patients	73-76
<b>VI. Cancer has a powerful effect on many sectors of life</b>	77-80
6.1. The patients and family are suffering from cancer.	81
6.2. Did the lymphatic cancer of the Emperor Frederick II change the world's history?	82
<b>VII. Cancer research helps to conquer cancer</b>	83
7.1. Cancer research is multidisciplinary	84
7.2. Experiments with animals help fighting against cancer	
7.3. New findings are distributed worldwide	
7.4. Cancer research needs much economic resources	
<b>VIII. Why cancer is now under control?</b>	
8.1. Because we can prevent the carcinogenesis by avoiding risks getting cancer	
8.2. Because we are able to detect cancer early e.g. by cancer screening	
8.3. Because we are able to characterize cancer in an effective way for "tailor-made treatment"	
8.4. Because excellent survival and recovering give hope to all cancer patients	

#### Explanations of the text

The story of the exhibit is written with a font size of 12 for 111.  
 The subjects of physical interest are written in italics with the font size of 11  
 and colored in blue. The copies are 50% of the original items.  
 Bold text is used to highlight the headings and important details  
 Author: Pekka Klom, MD, 20700 Turku, Finland

# 1. Historical views about cancer

## 1.1. First description of a malignant tumour is traced up to 3000 B.C. in Egypt

Many outstanding findings and inventions have helped the mankind to understand the history of human malignant and benign tumours.



Using Rosette stone Champollion solved in 1824 the code of hieroglyphic writing. This helps to read the old papyrus from thousands of years ago...



...the earliest written description of malignant tumour of breast is found in the Edwin Smith Papyrus, which was written round 3000 B.C. (i.e. 5000 years ago) by physician Imhotep...



...1873 Ebers found a papyrus dated 1550 B.C. with first descriptions of benign soft tissue and fatty tumours and malignant tumours of stomach, uterus and rectum.



Wilhelm Konrad Roentgen invented X-rays in 1895 and their use in diagnostics of bone tumours. Since then many bone tumours have been detected in the mummies.



The age of the buried people in the cemeteries and pyramids (Egyptian mummies) can be detecting by radioactive method by W Libby. He received Nobel Prize of the finding of this method in 1947. Thus the age of the bone lesions of the buried people have been proved to be true.

## 1.2. The cancer word originates from the Greek mythology.



Zeus was the God of the sky and ruler of the Olympian Gods...



...Zeus was married to Hera but often tested her patience, as he was infamous for his many affairs...



...Hercules (Herakles) was an illegitimate child of Zeus and the Goddess Alcmena. The wife of Zeus, Hera, did not want to get birth of Herakles but did not succeed to prevent the birth. Later Hera bewitch Hercules kill his family.

Hercules was forced to do twelve labors for making up his sin. While doing the second labor, slaying the Hydra (a monster with many heads), Hera sent a giant crab, (Karkinos in Greek), to help Hydra. In the end Hercules was able to kill Hydra...

...as a reward for its service Hera placed the crab among the stars as the Constellation Cancer. Ancient people considered that the changes in the Crab Star Constellation could cause cancer...



...since then malignant tumors have been called cancers...

*Cancer stamp of Panama with inverted "centesimo"*

...with reference to the previous story science, instead of Hercules, is fighting against cancer in this stamp.

*One preliminary die proof of anticancer stamp of France in 1941. Because of the nominal value of 2fr +50, instead of final value 2F 50 + 50, this was not approved.*



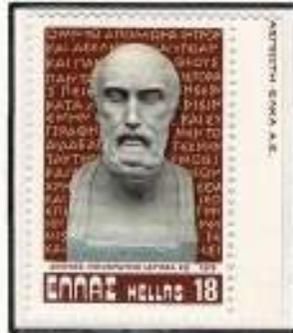
*The final stamp with correct normal nominal value of 2F 50 + 50.*



and many languages do have variations of the word cancer: kanker, kraefte, Krebs

### 1.3. Up to 19<sup>th</sup> hundred the origin of cancer was quite unknown for the people

**Hippocrates (459 B.C.)**, was the first, who understood that the diseases were caused naturally. Star constellation or bad will of the Gods do not have anything to do with this. According to Hippocrates, tumours were caused by an imbalance of the four humors: blood, phlegm, yellow bile, and black bile. He recognized cancers of the skin, mouth, breast, and stomach **but did not understand the real origin of cancer...**



**...Galen of Pergamon (130 B.C.)** followed the thoughts of Hippocrates that the diseases were caused naturally. **He also compared cancer with the crab.** Galen was a prolific writer who wrote more than 100 notes on tumours and cancers, more than any of his predecessors. Later during the Roman era there was only slow progress in medicine...



**...around 1000 Avicenna** also known by name Abu Ali Sina was a Persian polymath who is regarded as one of the most significant physicians, astronomers, thinkers and writers of the Islamic Golden Age. He has been described as the father of early modern medicine. He wrote books and writings on philosophy and medicine. **His most famous work is The Canon of Medicine**, a medical encyclopaedia which became a standard medical text at many medieval universities and remained in use as late as 1650.



The Arabic medicine in the Iberian Peninsula was flourishing up to the year 1492 when the moors were expelled.



There existed strange opinions still late in 1800. Dr. Lönnrot thought that cancer is a disease of a worm which is eating the body from inside (carnivore), but he was wrong.

## 2. Step by step we know more about cancer

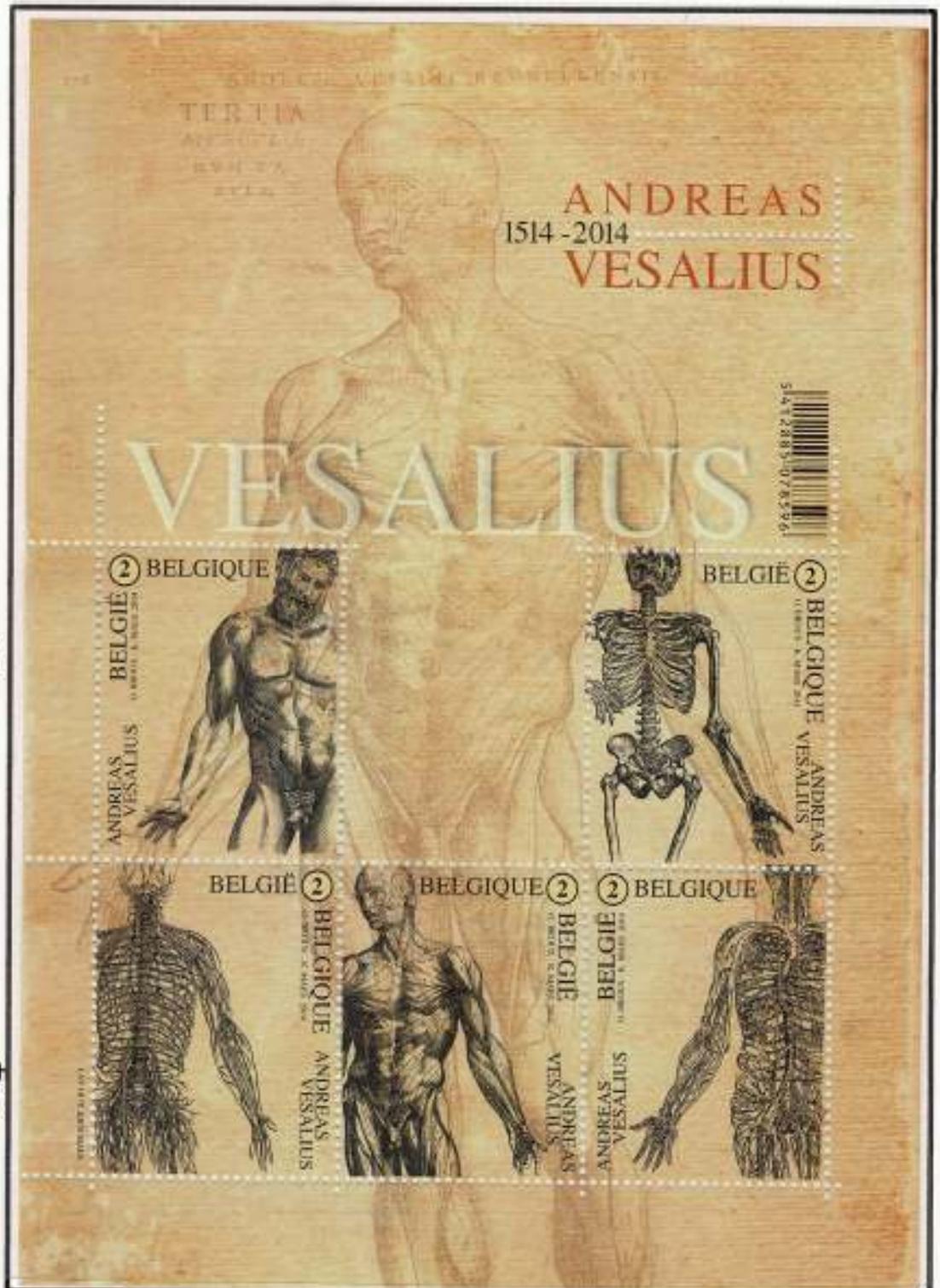
### 2.1. Natural science improved knowledge about cancer

2.1.1. Advances made in natural science served as base for further progress in the later centuries in understanding the nature of benign and malignant tumours

At the Middle Ages the medicine started to develop. Despite the conservative thinking the doctors were able to study anatomy and so they got a comprehensive view of the normal anatomy of the human being. **Vesalius was one of the most well known anatomist.**



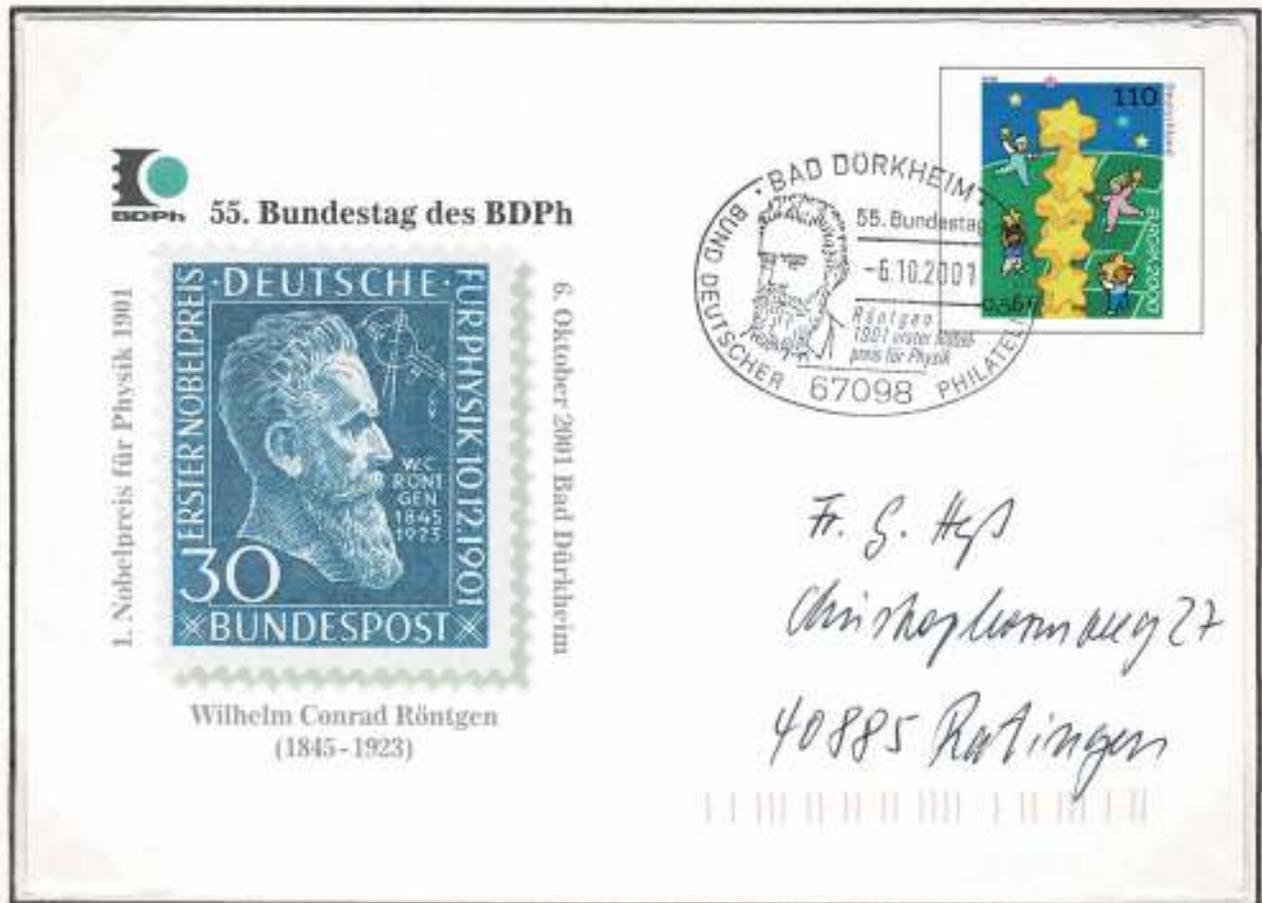
The invention of the microscope by the Dutch brothers Jansen in 1590 opened new ways to understand living structures of human being.



Very soon in Europe, there appeared departments of pathology where, instead of normal anatomy, diseased people were examined. **Dr. Morgagni was one of the great pathologists who described cancers and many other diseases at autopsy.**



2.1. Natural science improved knowledge about cancer  
 2.1.2 The knowledge of the anatomy of the human body increased



Wilhelm Conrad Röntgen invented X-rays and was the first Nobel laureate in physics in 1901.

Antoine Béclere created the first laboratory of radiology in 1897 in Paris. Radiology developed and helped the scientists to do more studies on humans. Very soon X-rays were ready to treat cancer patients.

*Artist's die proof of the stamp of Antoine Béclere in France in 1957 signed by the artist Henry Cheffler.*



## 2.1. Natural science improved knowledge about cancer

### 2.1.3 The knowledge of the structure and function of cancer cells developed



M Malpighi (1628 – 94) was an Italian biologist and physician who is referred to as the "Father of microscopical anatomy (i.e. histology), physiology and embryology"...



... Antonie van Leeuwenhoek 1632-23 and MFX Bishat 1771-1802 showed by microscopy that all living tissues are formations of cells...

... polish pathologist Dr. R Virchow (1821 – 1902) worked in Germany and stated a fundamental view that all diseases are caused by some failure in the cells. Nowadays we know that cancer is an uncontrolled growth of the cells.

**Din istoria stiintei universale**

DALTON  
KEKULE  
THOMSON  
RUTHERFORD  
BOHR  
SCHRÖDINGER

1803 – Dalton introduce atomul modern in stiintă

Destinatar \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Codul \_\_\_\_\_ Localitatea \_\_\_\_\_

ROMANIA  
RO  
SA MAI BINE

From the 19<sup>th</sup> century chemistry has described the basic chemical functions of life. This helps the scientists understand better cancers behavior and to develop medicines against cancer.

## 2.1. Natural science improved knowledge about cancer

### 2.1.4. In the 20<sup>th</sup> century science turned into study the basic functions of life



Medical science developed with long steps in the 20<sup>th</sup> century.

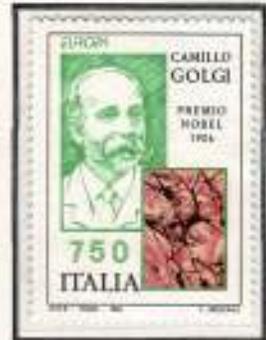
Many scientific inventions helped greatly to resolve the basic subcellular structures and functions of the cells and life.



The scientist used e.g. radioisotopes...



...electron and scanning electron microscopes...



... many other subcellular structures, the Golgi apparatus i.e. the power stations of our cells were described by Golgi.

Warburg is considered one of the 20<sup>th</sup> century's leading biochemists. He was awarded by Nobel Prize in Physiology in 1931. **Otto Warburg was one of the many scientist who found the basic biochemical functions of the life.** One of his ideas was that cancer is caused by the miss function of the energy production of the cancer cells.

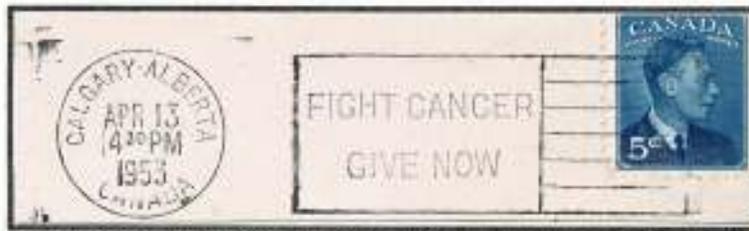


In the 20<sup>th</sup> century there were many Nobel Laureates because of many new findings and understandings around the biology of reproduction and finally the manipulation of our genome i.e. the DNA.

The diseases were localized into the chromosomes (Nobel Prize in 1933 TH Morgan and in 1983 B Clintock) and then in the DNA (Nobel Prize in 1962 FHC Crick, JD Watson and MHF Wilkins). Nobel Prize was given in 1978 to the scientists W Arber, D Nathans, HO Smith, who developed the methods for manipulating DNA i.e. our genome.

## 2.1. Natural science improved knowledge about cancer

### 2.1.5. In the 20<sup>th</sup> century science has taken out important questions in regard to Law, Ethics and Religion



Cancer is an uncontrolled growth of the cells. To fight against the cancer is just to stop the uncontrolled growth of the cancer cells. Researchers have reached the point where it is possible to manipulate our Genome i.e. DNA and thus cure the patient. But, but are we allowed to touch and change artificially the codes of our genome? Meanwhile we, the human beings, are answering this question the scientific world still needs money.

In 1978 MW Nirenberg shared the Nobel Prize with HG Khorana and RW Holley for breaking the genetic code describing how it operates in protein synthesis. HV Varmus and JM Bishop in 1989 for DNA techniques to identify genes involved in cancer and PA Sharp in 1993 for the discovery of the mechanism of DNA.



The technology to manipulate DNA was working since in the late 20<sup>th</sup> Century. But there are many problems to be resolved before starting to manipulate the human DNA, we have to take into consideration...



Law...



Ethics...



And Religion

**ADVANCES IN SCIENCE AND MEDICINE IN THE 20TH CENTURY**

**the human genome project**

**FRANCIS CRICK**  
Nobel Prize 1962  
Discovery of the structure of DNA

**MARSHALL W. NIRENBERG**  
Nobel Prize 1968  
Elucidation of the genetic code

**DANIEL HARTFORD**  
Nobel Prize 1981  
Discovery of restriction enzymes

**HAROLD E. VARMUS**  
**J. MICHAEL BISHOP**  
Nobel Prize 1989  
Use of oncogenes and DNA techniques to identify genes involved in cancer

**PHILIP A. SHARP**  
Nobel Prize 1993  
Discovery of DNA replication and genes

**Palau Postal Service 1999**

3060

## 2.1. Natural science improved knowledge about cancer

### 2.1.6. Only small number of cancers is inherited



**Our genome (DNA) codes the growth and functions of our cells and at last that of our body. The cause of inherited cancer is some fault in the DNA.** That leads an uncontrolled cell growth and cancer. Most inherited cancers occur in breasts and bowels but also in uterine, kidneys and endocrine organs. **Only minority, less than 10% of cancers are inherited.** The rest of cancers are originated by DNA changes which are caused accidentally or intentionally during lifetime.

In 1953 Crick and Watson identified the machinery how the DNA works, and in 2003 the human genome was resolved. We now know the normal DNA and we have methods to manipulate DNA. **Despite the good will however up to now it is not allowed to do any changes in our inherited genome but luckily...**



**...the laboratory techniques allow selecting healthy babies to be born.**

Only a few percent of the breast cancers are hereditary. These patients carry a failure in the DNA (S.C. BRCA-gene) which can be detected by using preimplantation test. One can use in vitro fertilization where only healthy fertilized ovum is implanted into the uterus. So, the baby will be born without the risk of getting this type of breast cancer.

### 3. We have to realize and avoid risks of getting cancer

#### 3.1. Smoking is the major single cause of cancer

##### 3.1.1. Tobacco was imported in Europe from South America

According to WHO "worldwide, tobacco use is the single greatest avoidable risk factor for cancer mortality and kills approximately 6 million people each year, from cancer and other diseases". Globally 12% among adults over 30 years of all deaths are attributed to tobacco. About 70% of lung cancers are caused by smoking. Smoking is also one of the risk factors of many other cancers such as laryngeal, oesophagus, stomach, pancreas, cervix and urinary bladder cancers.

Tobacco products are products made entirely or partly of leaf tobacco as raw material, which are intended to be smoked, sucked, chewed or snuffed. All contain the highly addictive psychoactive ingredient, nicotine. Tobacco smoke includes enormous amounts of carcinogens. Carcinogens are chemicals that change DNA i.e. makes mutations of the DNA. As a result the mutated DNA codes the wrong proteins which in turn guide the cells construct monstrous cancer cells and tissues. Nicotine dependence is an addiction to tobacco products. Nicotine keeps the people smoking.

The history of smoking dates back to as early as 5000 B.C. in shamanistic rituals. Many ancient civilizations, such as the Babylonians, Indians and Chinese, burnt incense as a part of religious rituals, as did the Israelites and the later Catholic and Orthodox Christian churches. Smoking in the Americas probably had its origins in the incense-burning ceremonies of shamans but was later adopted for pleasure. The smoking of tobacco, as well as various hallucinogenic drugs, was used to achieve trances and to come into contact with the spirit world.



Tobacco was imported from South America to Portugal by Columbus around the beginning of 1500.

*The stamp demonstrates Colon observing America. However the telescope wasn't invented until around 1600.*



*The two centivos stationery of Chile is made by The American Bank Note Company, founded in 1795. It was a major worldwide engraver of national currency and stamps up into the 1900s.*

French ambassador J Nicot in Lisbon took tobacco from Portugal to the European Countries around 1550. The tobacco plant *Nicotiana* and the most addictive chemical in tobacco, nicotine, are named after him. Nicotine does not cause cancer but tobacco smoke includes enormous amounts carcinogens which cause cancer.



### 3.1. Smoking is the major single cause of cancer

#### 3.1.2. Reducing tobacco cultivation and smoking could diminish cancer



With the stamp of Ecuador on the left (in 1929) the people were encouraged to cultivate tobacco. Later the overprinted stamp on the right (in 1938) collected money for cancer research. Its use was obligatory on all mail for one week late in the year 1938. At that time the relationship between smoking and lung cancer was not known.



The tobacco cultivation has been and is still a remarkable industry for many countries.

*An atelier die proof signed by the engraver Haley in 1972*



United Nations is fighting against cancer.

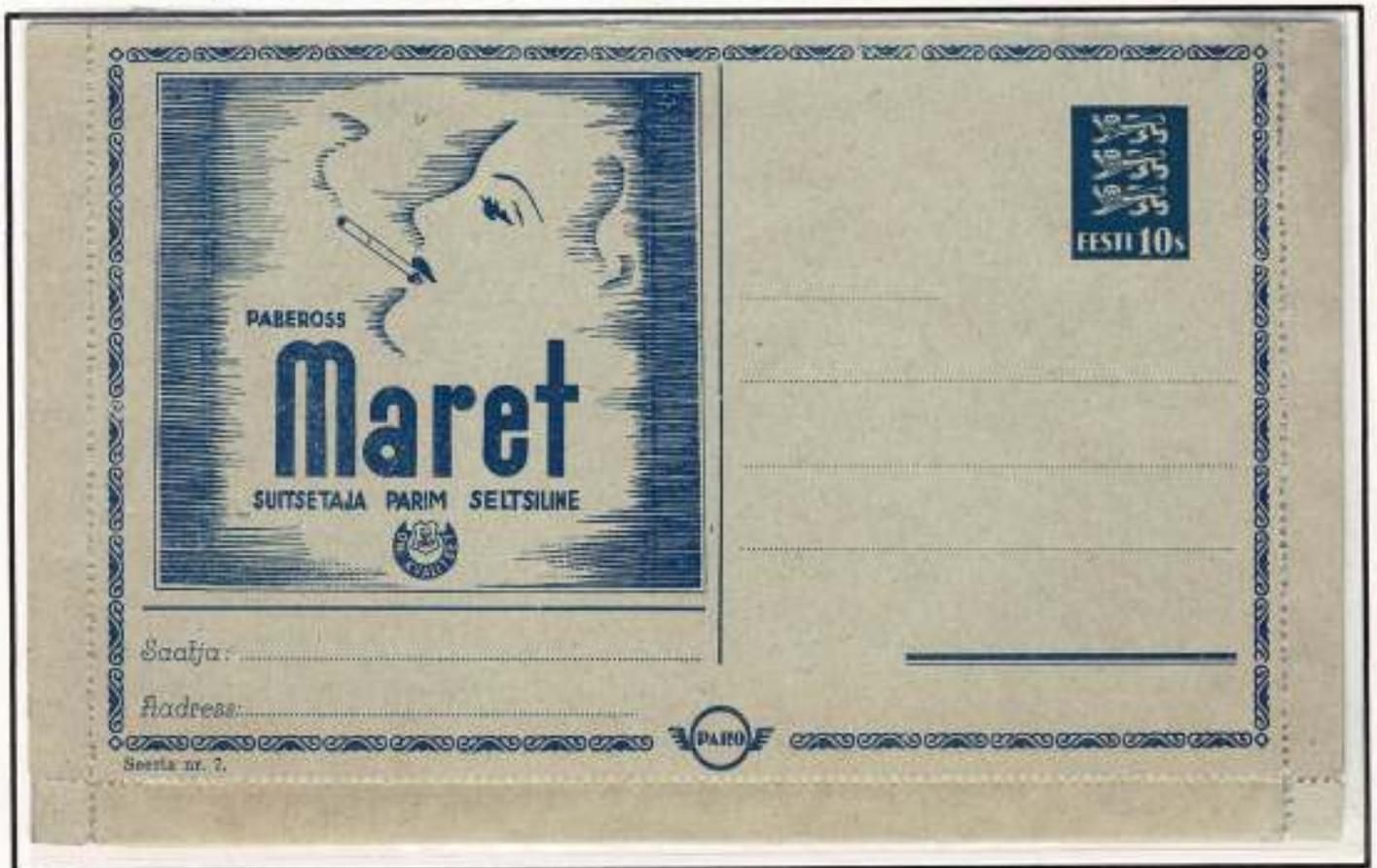


WHO's monitoring tobacco use and prevention policy include e.g.

- Offering help to quit tobacco use.
- Warning about the dangers of tobacco use.
- Enforcing bans on advertising, promotion and sponsorship of tobacco.

### 3.1. Smoking is the major cause of cancer

#### 3.1.3. Style of advertising smoking changed to promote non-smoking late in 1900



Advertisement of tobacco was very common up to late 1900 everywhere in the world.

Advertisement PARO-card for domestic use in Estonia of series N:o 7 of 28 different series for charity. 1000 examples of each series were made. The 10S cards were used in the years 1928 – 40. The 10 S cards were sold in post offices for 5 S each. Rest of the postage rate 5S and money for charity was gathered by the advertisements on the cards.



After the knowledge of the drawbacks of smoking the style of the advertisements dramatically changed late in 1900:  
Smoking will jeopardize your health or it is your choice: tobacco or health

### 3.1. Smoking is the major cause of cancer

#### 3.1.4. Campaign against smoking and lung cancer continues



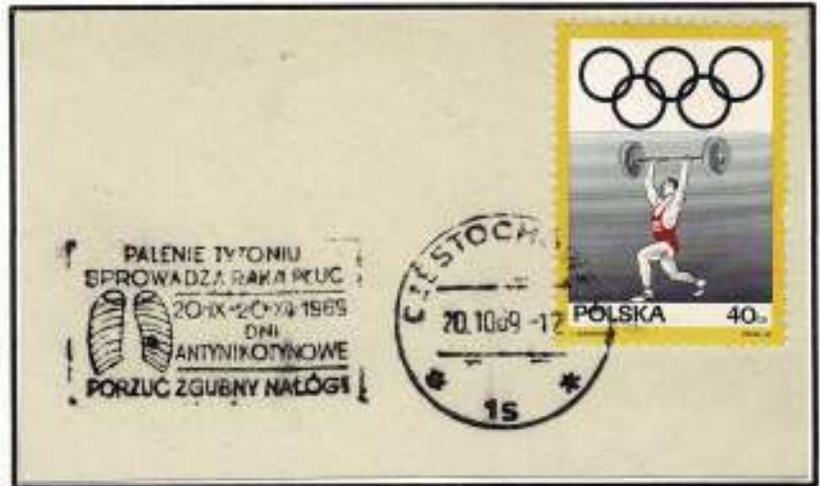
A specimen stamp from Greece



Voluntary cancer organization campaigns against smoking in Cyprus



Smoking does not fit the sport



Snuff is tobacco also and contains carcinogens and causes cancer in the upper airways.

Advertising Meghdoot Post Cards of India were first published in 2002. The minimum order was 100000 cards. Meghdoot cards are printed in the Security Printing Press at Hyderabad. They are priced at 25 paise that is 50% of the normal prize (1 rupee = 100 paise). Rest of the postage rate is covered by advertisement on the front page of the card.

## 3.2. Alcohol beverages are carcinogenic

### 3.2.1. How alcohol leads to cancer? Advertisement of alcohol

According to WHO about 3.3. Million deaths in 2012 were estimated due to alcohol (ethanol) consumption. The highest number of deaths was from cardiovascular diseases, followed by injuries, gastrointestinal diseases (**cirrhosis**) and **cancers**. Ethanol itself is not carcinogenic but the metabolic product of ethanol the **acetaldehyde is carcinogenic**. Alcohol consumption causes e.g. mouth, pharyngeal, laryngeal, esophageal, liver and pancreas cancers.

Nowadays the public advertisement of alcohol beverages is regulated. Especially there is a reasonable concern about the young people.

TELEGRAMMI

Mod. 30 - Telegr. 1935. XIII

N. 100 di recapito - Rimesso al fattorino ad ore \_\_\_\_\_

*Nulla è dovuto al fattorino per recapito. Il latore rimette una ricevuta a stampa quando è incaricato di una riscossione.*

P.A. Poventa'

Le azioni successive ad essere compiute dal destinatario devono essere completate dal mittente.

Il destinatario è invitato a firmare la ricevuta presentata dal fattorino e a segnare la data e l'ora della consegna del telegramma. In mancanza di tali indicazioni il destinatario perde il diritto a reclamare in caso di ritardo della consegna.

Le ore si contano sul meridiano corrispondente al tempo medio di ogni zona centrale, e per telegrammi interni e con vari pezzi uniti di seguito da una mezzanotte all'altra.

Nai telegrammi impressi in caratteri romani, il primo numero dopo il nome del luogo d'origine rappresenta quello del telegramma, il secondo quello delle parole, gli altri la data, l'ora e i minuti della presentazione.

to il 9/9 1936 ore 22,13

Ricevuto Cl

recinto N 2420

PROVENIENZA	NUM.	PAROLE	DATA DELLA PRESENTAZIONE		VIA E INDICAZIONI EVENTUALI D'UFFICIO
			Giorno e mese	Ora e minuti	
<u>Salerno</u>	<u>86</u>	<u>13</u>	<u>9</u>	<u>27</u>	

minuta adunata telegrafica precedenza assoluta

tempanti

Prefetto Soprano

**CIN** APERITIVO  
FONDA. S.p.A. C. PAVIA - MILANO

**SPUMANTE CINZANO** *preferiti!*

In the beginning of the 20<sup>th</sup> century alcohol advertisement appeared everywhere, on the telegrams, stationeries, in advertisement letters etc.

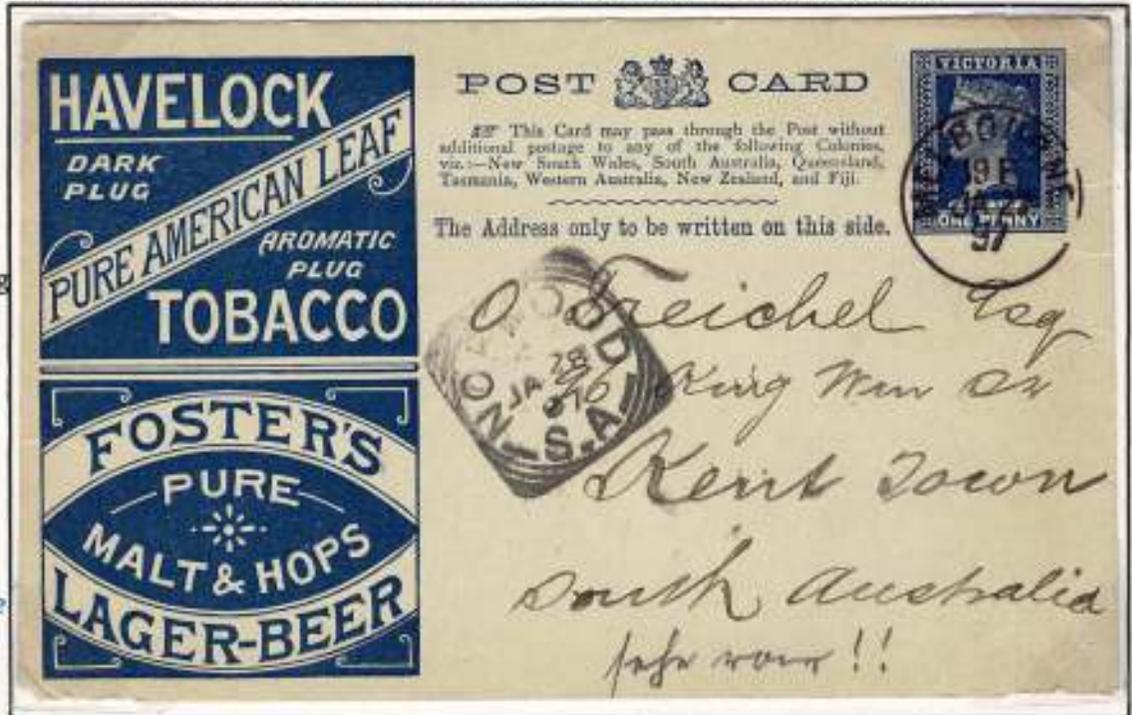
*Telegram with advertisements of alcohol beverages by order 98 (10.1.1935) models 30 in the year 1935 from Italy. A total of 5 Mill. copies were printed in Stab. Vallecchi, Firenze, Italy. A stamping 9.5.1936 of Laureana Cilento from South Italy.*

### 3.2. Alcohol beverages are carcinogenic

#### 3.2.2. Combining drinking and smoking increases the risk of cancer

Around the 1900s there were many advertisement that simultaneously advertised tobacco and alcohol. Smoking and drinking simultaneously increases much the risk to get cancer.

Stationery with tobacco and beer advertisement from the year 1897. Sent from Melbourne to Kent Town in Australia.



Busta-Lettera-Postale (B.L.P) is an Italian letter on which many advertisements appear on the front and backside. Part of the yield from the advertisements was used to sell the letter to public at 5 cents lower rate than the normal franking value. A discounted stamp with letters B.L.P. was allowed to use only on it. B.L.P. was used between 1921 and 1923 in Italy. Major part of the yield of the advertisements was sent to the organizations of war wounded. No one can deny the benefit of the yield gathered for the war wounded. On the other hand no one can deny the drawbacks of the heavy consumption of alcohol.

### 3.2. Alcohol beverages are carcinogenic

#### 3.2.3. There is a constant competition between alcohol advertisement and treatment of the diseased people

Sage type advertisement of alcohol from the year 1895 in France.

A part of the advertising page and the front page of the stationery of Sage issue (Lettre Annonce Serie N:0 1) from France. It was sold with only 5 centimes because the paid advertisements. The nominal value was 15c for domestic use.

<b>VINS FINS &amp; ORDINAIRES</b> DU BEAUVOLAIS ET DU BAGOIS <b>A. JANDARD</b> Romanèche-Thorins (S.-et-L.)		<b>MARC JANDARD</b> LE MEILLEUR MARC DE LA BOURGOGNE		<b>VINS FINS &amp; ORDINAIRES</b> DU BEAUVOLAIS ET DU BAGOIS <b>A. JANDARD</b> Romanèche-Thorins (S.-et-L.)	
<b>EUX D'ARTIFICES</b> EN TOUS GENRES <b>HEUREUX FRÈRES, Artificiers</b> 49, rue de Roanne, ST-ETIENNE (Loire) Cartons français sur demande		<b>ONGUENT &amp; ELIXIR</b> DE ST-ETIENNE DEONARD Riomarin (Loire). S'y adresser. On l'apporte par le train, Paris		<b>MANUFACTURE de CHAUSSURES SUPERIEURES</b> <b>SERVIER ET LACHASSAGNE</b> 8, rue Traversière, ST-ETIENNE (Loire)	
<b>UNION DU RHONE</b> <b>RENSEIGNEMENTS COMMERCIAUX</b> 58, Rue de l'Hôtel-de-Ville <b>LYON</b> Téléphone			<b>QUINA BRUNO</b> AU VIN VIEUX D'ESPAGNE Se vend partout 3 Litre 12 litres 36 fr. Sans F. Digne tonner. Bonne pharmacie BRUNO-LAVOIRIER, pharmacien, 36, quai Faidherbe, LYON. <b>QUINA BRUNO le meilleur PARTOUT</b>		
		<b>Clunystine</b> LIQUEUR DE L'ABBAYE DE CLUNY		DÉPÔT GÉNÉRAL <b>J.-B. CHAMONARD</b> Romanèche-Thorins (SAONE-ET-LOIRE) On accepterait partout Représentants sérieux	
12.340 — Lyon — Imprimerie de la Lettre-Annonce, rue Nôtre-Dame, 71.					



CETTE LETTRE EST VENDUE 0,05 CENTIMES.

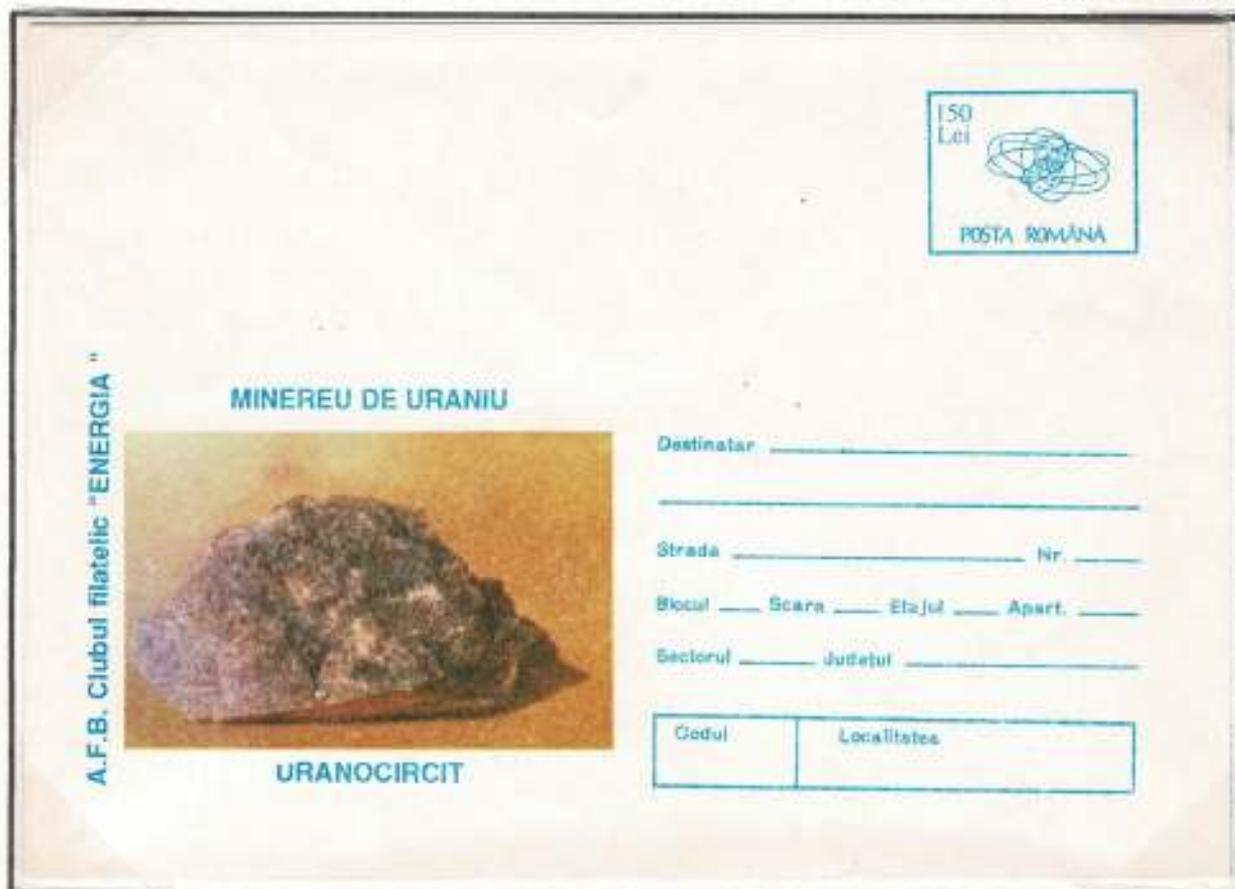
<b>CENTRE                  D'HEPATO-GASTRO-ENTEROLOGIE</b> Dr B Geier - Dr J Le Portz Dr F Le Tallec - Dr R Mahé - Dr L Prigent 27 ter Rue Traverse 29200 BREST			BREST CCT1 FINISTERE 17-10-03 1439 00 004120 FC6C22 292400	<b>€ R.F.</b> LA POSTE <b>00050</b> VK 404336
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Fortunately there exist special centre for liver and other alcohol related diseases.

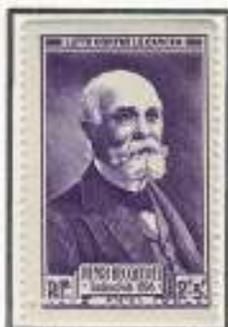
### 3.3. Radiations are the known causes of cancer

#### 3.3.1. History of radioactive radiation

Radioactive radiation is ionizing radiation. Typical ionizing subatomic particles from radioactivity include alpha particles, beta particles and neutrons. They damage the structures of the cells and cause mutations (changes in the DNA) in the DNA and as a consequence the cells die or begin to grow abnormal i.e. a cancer was born. The cells divide with different velocity and grow uncontrolled. They form monstrous structures with nonsense function. They destroy surrounding normal tissues and finally send metastasis overall in the human body. Despite of adequate treatment the end result might be death.



*The French stamp of Becquerel with misperforation.*



Becquerel discovered in 1896 radioactivity of uranium. He received Nobel Prize in 1903. Uranium is enriched from uranium-ore...

Pierre and Marie Curie discovered Polonium and Radium in 1898 and used first time in history the term radioactivity.



*A sunken colour trial proof of Republic of Panama made by the American banknote Co.*

### 3.3. Radiations are the known causes of cancer

#### 3.3.2. Radioactivity is used in atom bombs and in production of nuclear energy

In accidents e.g. in Chernobyl or intentionally e.g. two Atom Bombs and many test atom bombs in history include risks of producing radioactive particles which can induce cancer.



O Hahn is considered the father of fission reaction. Fission reaction is needed when producing nuclear weapons and nuclear energy.



In 1945 to give stop of the World War II an atom bomb was dropped from Enola Gay to Hiroshima.



*A specimen above left and a black and white proof on the right.*



Later another atom bomb was dropped to Nagasaki. The cities were destroyed and thousands of people were killed and later diseased from thyroid and blood cancers.



*On the tab one can read the description of the first nuclear Bomb test in 1946 after the WWII.*

July 1, 1946 the first of many nuclear bomb tests was performed at the Bikini Atoll. As a consequence of this a radioactive rain was spread over Bikini Atoll. Thus the nuclear tests can also produce cancer for people.



Much concern has occurred about the nuclear power stations. Please, remember the Chernobyl accident. However an adequately planned and constructed nuclear power station is safe and gives clean energy.

### 3.3. Radiations are the known causes of cancer

#### 3.3.3. Ultraviolet radiation is cancerogenic. Are radiation of mobile phones safe?



Ultraviolet radiation B e.g. from the sun is dangerous and causes skin cancer...

*Above a Publibel-card N: o 1177 from Belgium. The first advertising cards were issued in 1933, and had a typical printing quantity of 500 copies each. Any company can make a request to Belgium Post for cards. Belgium Post assigns the unique Publibel number to each design and the company provide text and pictures for the advertising wanted. Up to year 2002 around 5000 different issues have been printed.*

We can benefit solar energy to make energy here on the earth. One should not sunburn the skin because there is risk to get skin cancer...

*An advertisement of the World congress of International solar energy on the sheet margin*



... therefore it is very important to protect the skin from sunburn



In 2011 WHO considered that radiation of the mobile phones could be a cancer risk?

The children and youth are nowadays using more and more mobile phones. The scientific people know that it takes decades from the exposure of some carcinogens until a cancer appear. So we don't know what's going happen to young people when they grow elder. However up to now there has appeared no scientific proof on the carcinogenic effect of the radiation of mobile phones.

### 3.4. Working and environmental conditions may cause carcinogens

#### 3.4.1. More about the preventable cancers



In 18<sup>th</sup> century small boys swept chimneys and got skin cancer in the groins due to coal dust. Later Lord Shaftesbury Drafted a law to forbid child labour. Since then working conditions have improved everywhere.



A tannery is the place where the skins are processed. Tanning is the process of treating skins to produce leather, which will be more durable and less susceptible to ruin. Traditionally, tanning used tannin, an acidic chemical compound from which the tanning process draws its name. The tanning process may produce carcinogens which in turn may cause cancer.



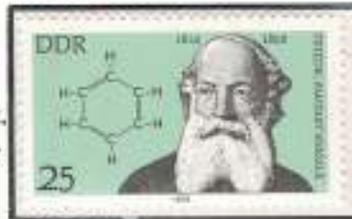
At upper right 75 % copy of the upper part of the front page of the French stationery in 1901.

### 3.4. Working and environmental conditions may cause carcinogens

#### 3.4.2. Pollution includes carcinogens

Air pollution is a complex mixture of many different chemical substances and the exact contents vary depending on what sources of pollution are nearby, your location, the time of year and even the weather.

Kekulé discovered **benzene**.  
It is the first chemical that was found to be carcinogenic.  
We can be exposed to it near the petrol stations.



It can cause blood cancer i.e. leukaemia.



It is possible to treat leukaemia



Already in the 1970<sup>th</sup> in the USA the unpolluted environment drew much attention.



Traffic generates much pollution with carcinogens.

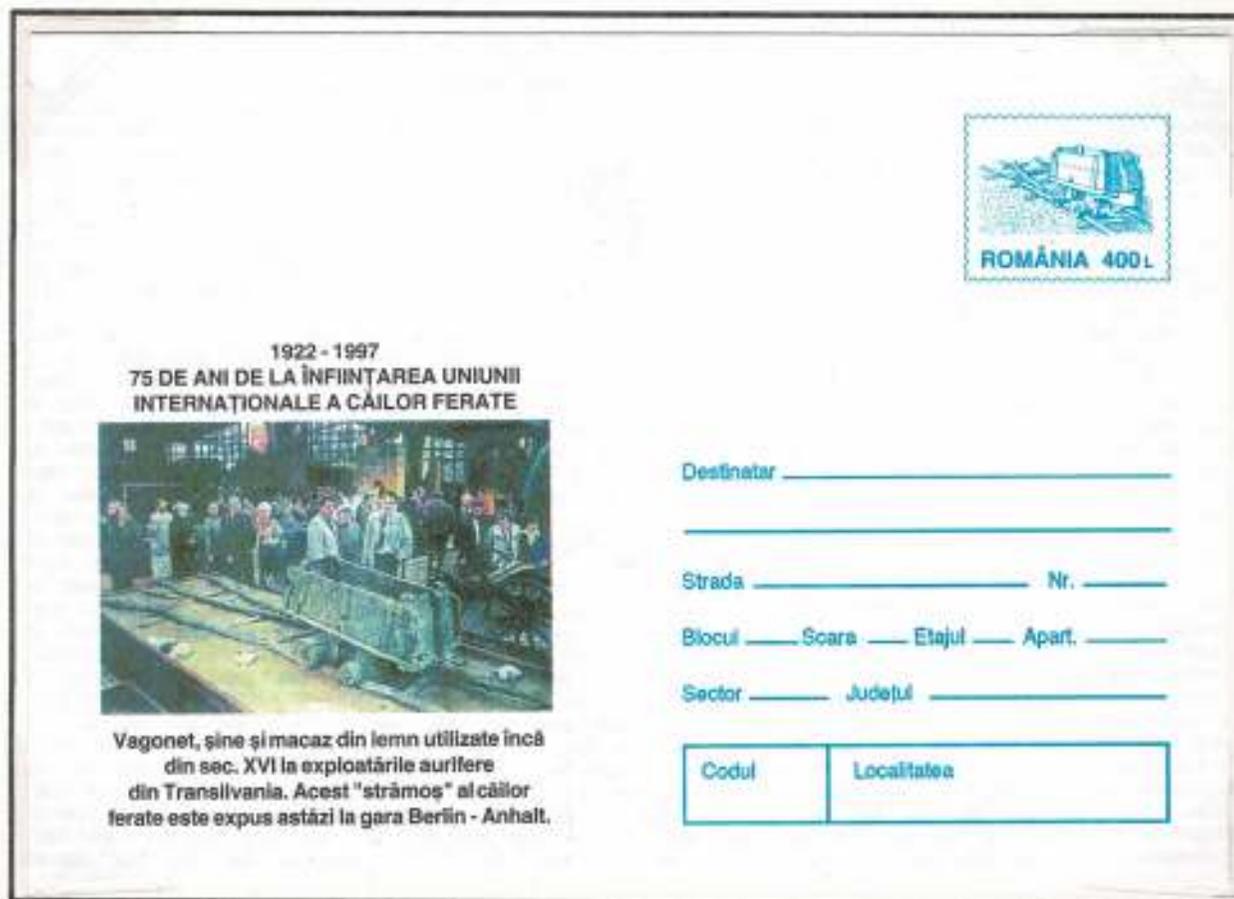
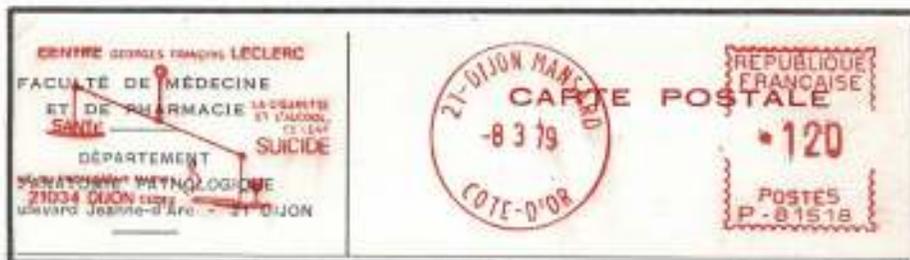


According to WHO in 2012 the exhaust fumes of diesel fuel contain carcinogens and can cause cancer. Diesel engine fuels belong in the same potentially deadly category as asbestos, arsenic and mustard gas.

### 3.4. Working and environmental conditions may cause carcinogens

#### 3.4.3. Simultaneous exposition to carcinogens multiply the risk get cancer

Smoking and drinking simultaneously increases the risk to get various diseases and at the worst die of cancer.



The exposure to radon in mining combined with smoking multiplies the risk of getting lung cancer.

Asbestos, the insulating product, has been used since late in 1800s to insulate steam engines and fire-proof all sea-going vessels. The automobile industry use it in brakes, clutches and all friction products. Asbestos causes asbestosis which is a risk factor to get pleural and lung cancer.

Simultaneous exposure to asbestos and smoking multiplies the risk to get cancer.



### 3.4. Working and environmental conditions may cause carcinogens

#### 3.4.4. Cancers possibly caused by human activity



In 2018 the big chemical company BAYER bought by 63 billion dollars a large chemical company Monsanto...

...Monsanto produces Roundup which contains glyphosate-based herbicide, which is believed to induce lymphatic cancer.

Up to now there is no scientific proof that Roundup and its components are responsible for cancer. There are now ongoing legal proceedings against Bayer and its subsidiary (Monsanto) in USA.



Plastic surgery is a discipline that does constructive surgery. During the latests 50 years more and more breast implants have been placed. One type of breast implant is accused for inducing lymphatic cancer in breasts...



...up to now there is no scientific evidence that these implants are responsible for lymphatic cancer in breasts.

These kind of cases are rare examples where a chemical or a medical material is supposed to be carcinogenic. Scientific point of view it is very difficult to demonstrate that just a special thing is responsible for cancer. Statistically and epidemiologically it is possible to show a relationship between a causative agent and cancer. Up to now there are too few cases for receiving a decisive opinion.

In coming years we are going to see more lawsuits against chemical companies.

*A three strip color proof of the stamp of the French Territory of the Afars and the Issas*





### 3.5. Infectious agents such as virus, bacteria and parasite may be carcinogenic

#### 3.5.2. Human immunodeficiency virus (HIV) is dangerous

At the mid of 19<sup>th</sup> hundreds scientists identified a type of chimpanzee in West Africa as the source of HIV infection in humans. The people hunted these animals for meat and came into contact with their infected blood. It is believed that the chimpanzee version of the immunodeficiency virus (called simian immunodeficiency virus or SIV) most likely was transmitted to humans and **mutated into HIV**. Over decades, the virus slowly spread across Africa and into Haiti and into other parts of the world. However this theory has not been proven to be true with certainty.



Human immunodeficiency virus HIV was scientifically detected in 1983 by two French virologists, Françoise Barré-Sinoussi, and Luc A. Montagnier. Both worked at the famous Pasteur Institute in Paris.

France and many countries are much concerned about HIV and AIDS.

*Horizontal misperforation.  
The sheet margin is used for information and advertisement against AIDS.*



HIV causes Acquired Immune Deficiency Syndrome (AIDS), a deadly disease. It affects many organs in human body. As a consequence of AIDS malignant tumors may develop; e.g. lymphomas and Kaposi sarcomas.

*Here a portrait of Dr. Kaposi who described the Kaposi sarcoma which may develop to the AIDS' patients.  
A specimen stamp.*



### 3.5. Infectious agents such as virus, bacteria and parasite may be carcinogenic

#### 3.5.3. Hepatitis B, bacteria and parasitic infections are dangerous

**Hepatitis B** is a viral disease that is spread with blood contact e.g. of unprotected sex or with needles or drug abusers. Hepatitis virus causes hepatitis and cirrhosis thus increasing the risk of liver cancer



**Helicobacter pylori** infection causes gastritis and may be the cause of a gastric ulcer, gastric lymphoma S.C. Malt lymphoma and gastric cancer. Dr. J. Robin Warren a pathologist discovered the bacterium *Helicobacter pylori* and later in 2005 received together with the clinician Barry J Marshall Nobel Prize. Many scientific congresses have been held overall in the world about the *Helicobacter pylori* and the consequences it will cause.



**Schistosomiasis**, also known as **snail fever** and **bilharzia** was described by Dr. Theodor Bilharz late in the 18<sup>th</sup> in Egypt. Schistosomiasis is a disease caused by parasitic flatworms called *Schistosoma*'s. The urinary tract or the intestines may be infected. The worms migrate to the veins around the bladder and ureters. The risk of bladder cancer appears to be especially high in male smokers, perhaps due to chronic irritation of the bladder lining allowing it to be exposed to carcinogens from smoking. Bladder cancer diagnosis and mortality are generally elevated in affected areas, and efforts to control schistosomiasis in Egypt have led to decreases in the bladder cancer rate.

### 3.6. There exist hormone dependent cancers

#### 3.6.1. Cancer in breast and womb has similar risk factors

Incidence rates of breast cancer vary greatly worldwide from 19.3 per 100,000 women in Eastern Africa to 89.7 per 100,000 women in Western Europe. Some 5% of females carry an inherited DNA failure that predisposes breast cancer. Statistically having no delivery, overweight, long lasting hormone contraception, smoking, heavy consumption of alcohol and hormone replacement therapy especially in elder age increases slightly the risk to get breast cancer but also endometrial cancer (womb cancer).

**The incidence rates of both breast and womb cancers are increasing both in the developed and the developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles.**



On the other hand many full-term pregnancies prevent breast cancer.

Smoking is a risk factor for both types of cancer



**ASPIRUS™**  
WOMEN'S HEALTH  
BREAST CENTER

---

**STAMP OUT BREAST CANCER**  
Women's Health Station  
May 12, 2009  
Mosinee, WI 54455





According to Australian Cancer Society one in 14 Australian women have breast cancer

In some countries one can get information about cancer from a special breast centre.



There is no predisposition of race or profession. The actresses Ingrid Bergman and Greta Garbo suffered from breast cancer.

### 3.6. There exist hormone dependent cancers

#### 3.6.2. Prostate cancer is one example of hormone dependent cancers

In many western countries the incidence of the prostate cancer has continuously increased. It is the leading cancer among men. The incidence of prostate cancer in the developing countries is lower than the incidence in the western countries. However, very soon the incidence evens out among the migrants to the level of the western host country. This has been observed very well in U.S.A. where there are millions of migrants. The reason of this might be the change of the socioeconomic status and dietary changes of the migrants in the host country. More over **male hormones (androgens)** have some role.



Red meat...



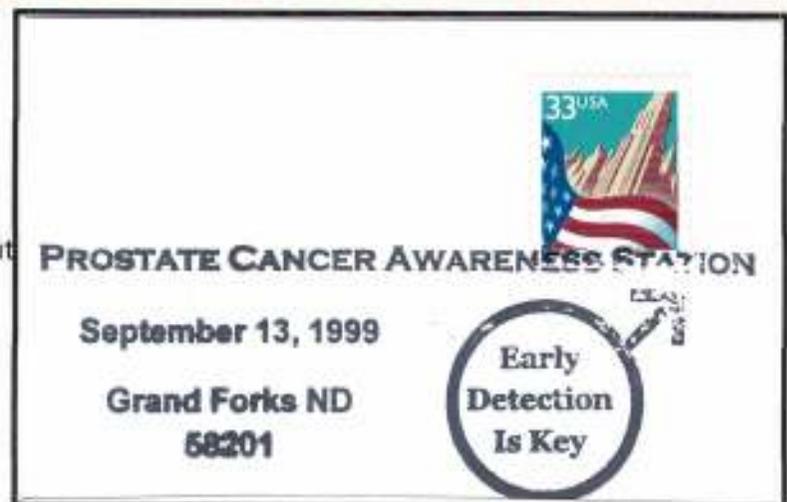
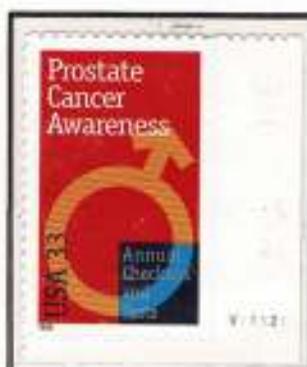
...obesity...



...and **dairy food** have been found to be risk factors for prostate cancer. a small number of prostate cancers has its origin in the genes.

*The a sheet margin includes a cow and the phrase from the Bible Joel 4.18 indicating the importance of dairy products*

There are special stations where men can have their prostate examined. Also information about cancer of prostate will be given.



The laboratory test of prostate cancer (PSA) can be used for screening and follow up of the patient suffering prostate cancer. However there are different views about the value of PSA test as a screening for prostate cancer.



Cancer research needs money

Eating tomatoes might have some preventive effect for prostate cancer. The red colour of the tomatoes originates from lycopene that is a chemical acting as antioxidant. It diminishes the number of free radicals thus diminishing the possibilities of arising prostate cancer.



### 3.7. Overweight is risk of cancer

According to the press release by WHO in December 2014 "there were half a million new cancers in 2012 due to overweight and obesity in the world. Proportion of obesity-related cancers was higher in women than men." The abnormal hormonal balance due to dietary factors of the obese people may be one reason for increased number of cancer.



Obesity increases the risk of intestine, uterine and breast cancer.

One can try losing weight with industrial products.



Vegetarian diet is good for health and prevent getting cancer.

Die proof in brown signed by the engraver Barlangue of the stamp of Martinique in 1947.

### 3.8 Unknown issues about the origin of cancer.

#### 3.8.1. Less known or unknown issues of cancer



If we know all the risk factors of cancer we would avoid them as good we can. However there are much unknown issues in the development of cancer so we are not able to do anything.



At present the scientific world does not know much about the origin of brain, bone and soft tissue cancers such as sarcomas.

Patients having a transplanted kidney have an increased risk to get cancer. Immunosuppression and treatment may be the causes.



It is very ironic that a well-known DNA-scientist Leena Palotie died of a malignant tumour, sarcoma of unknown origin



The film "The Conqueror" was shot in 1955 in the Canyonlands around Utah town of St. George. It was an A-bomb test area with a radioactive fallout. 91 of the 220 persons who worked there had suffered from cancer by 1980s. According to the cancer statistician's under ordinary circumstances only 30 people out of that group should have gotten cancer. Susan Hayward and John Wayne who were film stars in that film died of cancer.

### 3.8 Unknown issues about the origin of cancer

#### 3.8.2. Uncertain correlations to cancer



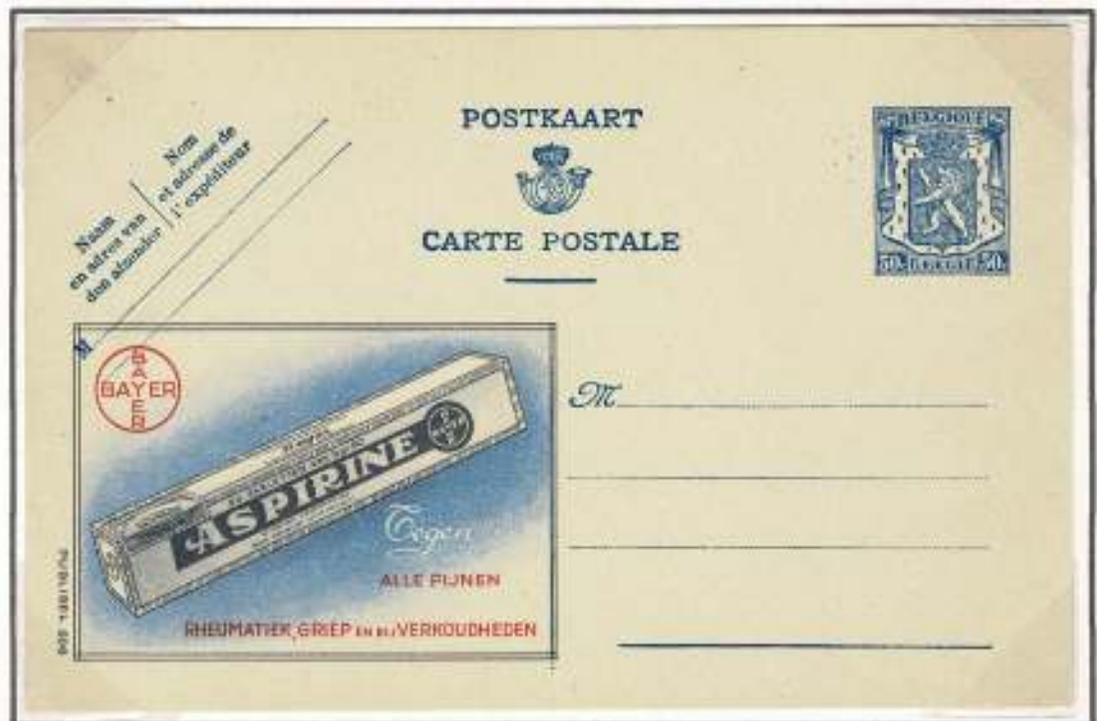
A Meghdoot card from India. Please, see the description of the Meghdoot stationery card on the page 15

On nutrition websites and blogs, the health claims of coconut water are numerous, including its ability to prevent cancer. However there is no scientific evidence of this.

Coffee bean includes appr. two thousand chemical compounds. By some authors Coffee drinking increases the risk get the pancreas cancer. Drinking coffee more than 5 cups a day diminishes the risk of dying of prostate cancer. According a meta-analysis coffee had no effect on breast cancer. However scientific evidence of the above mentioned thoughts related to cancer are lacking.



By the end of 20th century some scientists said that long standing use of acetosalisyl acid increases the risk of get intestine cancer. However there is opposite opinions as well.

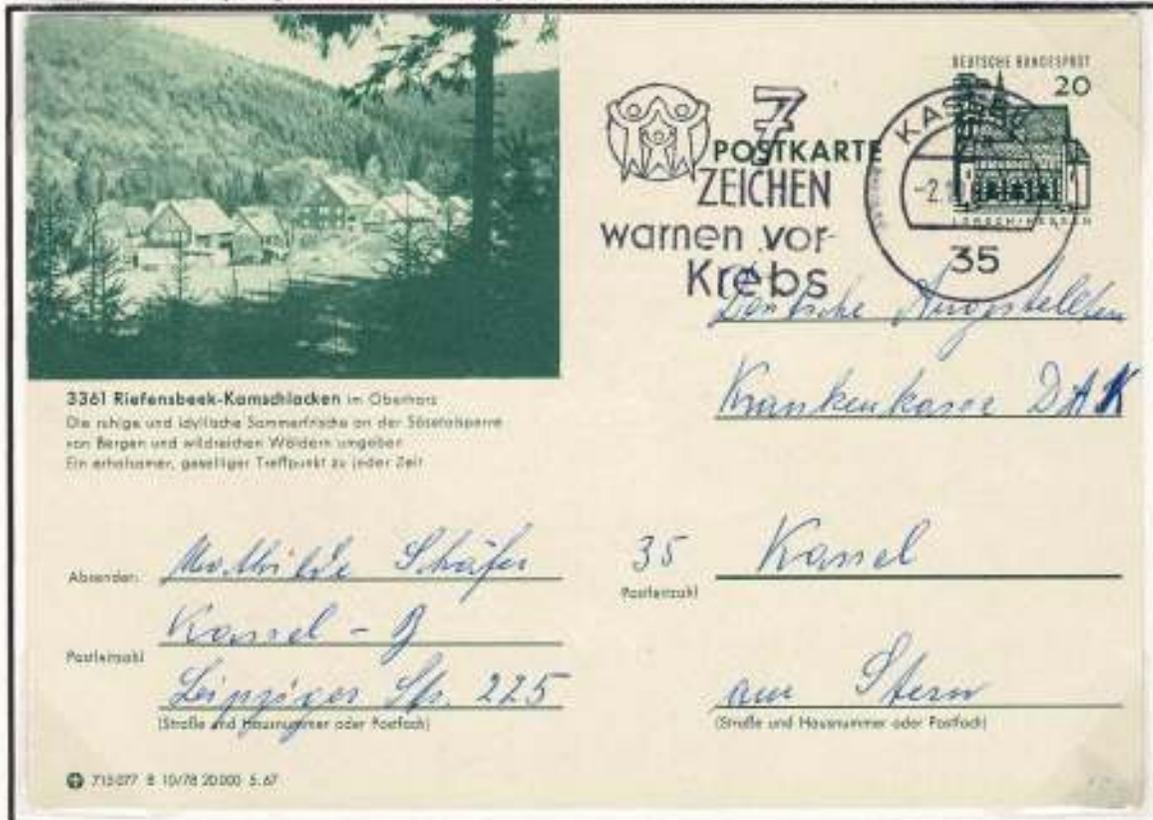


A Publibel-card N: o 506 from Belgium. The first advertising cards were issued in 1933, and had a typical printing quantity of 500 copies each. Any company can make a request to Belgium Post for cards. Belgium Post assigns the unique Publibel number to each design and the company provides text and pictures for the advertising wanted. Up to year 2002 around 5000 different issues have been printed.

4. Cancer must be diagnosed before treatment  
 4.1. We have to pay attention to the symptoms of cancer



Despite the fact that cancer occurs when you least expect there is much one can do to minimize getting cancer. Cancer can occur with/or without symptoms or can be found by organized screening for cervix cancer of the uterus and breast cancer.



Long lasting unhealed ulcer, elsewhere in the body a tumour, a bleeding of unknown origin, fatigue, pain, inappetent and losing weight are signs which need to be resolved.



A palpable lump (tumour) in the breast, in the armpit or elsewhere in the body must be examined for excluding the possibility of malignancy.

A presentation issue of the stamp of France in the year 2005 on the left.

## 4.2. Cancer screening helps to detect cancer in the uterine cervix and breast

### 4.2.1. Pap-smear finds precancerous and cancerous cells in the cervix

Major part of cervical cancers is caused by Human Papilloma Virus (HPV). It infects the cells in the uterine cervix and transforms them precancerous (pre-malignant) and later cancerous e.g. real cancer cells. This is a continuum we can break and so prevent the development of cancer in the uterine cervix. By taking and examining cells from the uterine cervix by **PAP-smear** (also known by the name Pap test) we are able to find the changes of the cells. They can be treated and thus the development of cervical cancer will be prevented.



The pap smears are processed and stained for examination in the laboratories of pathology or cytology



The Pap-smear was discovered by the Greek Doctor Georgios Papanicolaou in 1950<sup>th</sup>



The Pap-smear is examined with microscope by special educated health personnel. Then the report will be send to the health personnel who is responsible of the treatment or other step of the screening process. Of course the screened person will also be reported of the result.

## 4.2. Cancer screening helps to detect cancer in the uterine cervix and breast

### 4.2.2. WHO is concerned about cervix cancer in the developing countries



Save life by detecting the cancer early

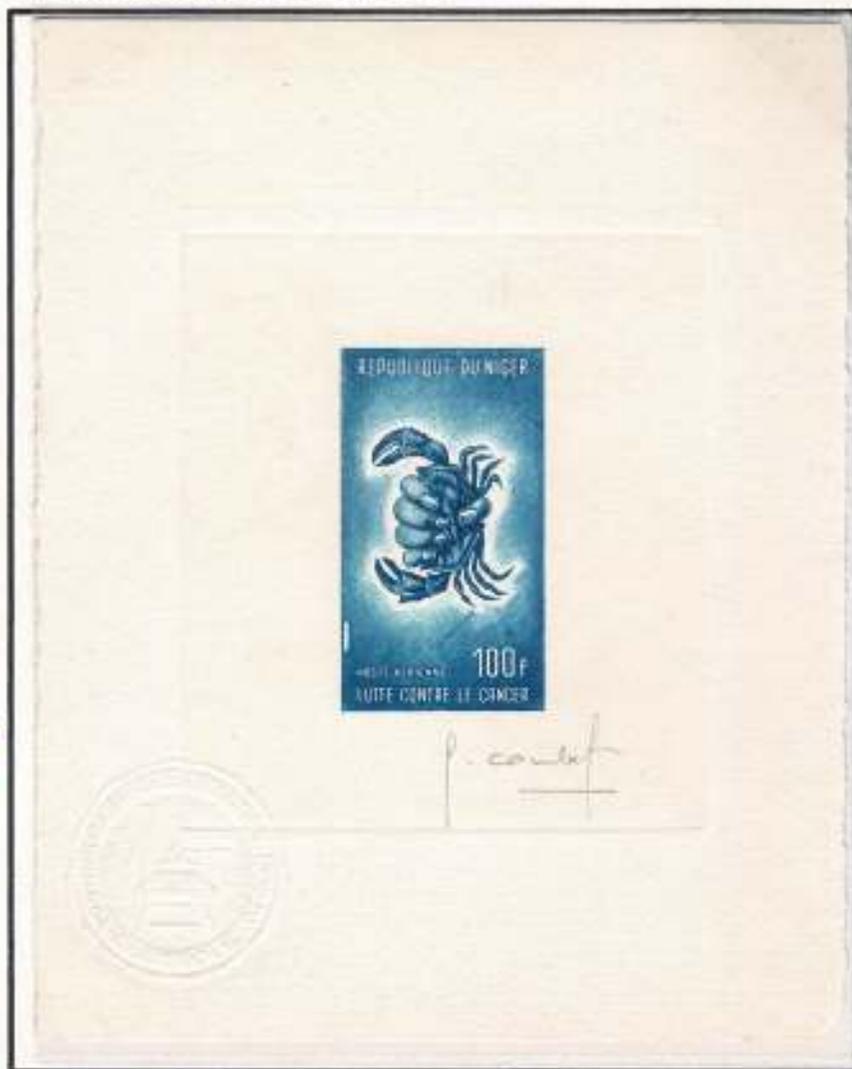


In many developed countries the cervical cancer is beaten down by screening programs but in many developing countries there are lot of work to be done.

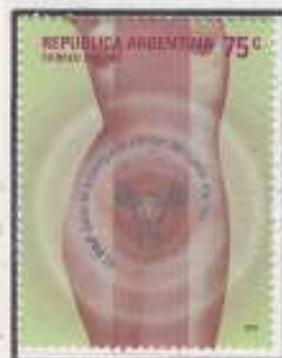
The lack of economic resources is the main reason for the insufficiently organized screening programmes.

*Nigerian stamp and its atelier die proof signed by the artist. On the left lower corner one can see the press mark of the printing house "Imprimerie des Timbres Poste".*

*The press mark was in use 1959 – 64.*



*The sheet margin can be used to advertise beneficial themes.*



It is very clever to use all places for information.

These stamps encourage women to participate  
The lives will be saved.

## 4.2. Cancer screening helps to detect cancer in the uterine cervix and breast

### 4.2.3. Breast cancer screening by self-palpation and mammography



According to WHO paper in 2015 "every year, breast cancer kills more than 500,000 women around the world. In resource-poor settings, a majority of women with breast cancer are diagnosed at an advanced stage of disease; their five-year survival rates are low, ranging 10-40%. In settings where early detection and basic treatment are available and accessible, the five-year survival rate for early localized breast cancer exceeds 85%."



There are two screening methods to detect breast cancer

The first method, self-palpation, is an easy, cheap and highly recommended method.



The woman is advised to palpate her breasts once a month. If she finds changes she is guided to consult the physician.



The second and more expensive method is the mammography examination every second year for women of 50 to 69 years of age. It can be carried out for younger and elder women, as well. The world scientific community has not reached a uniform opinion about the guidelines of how often and to whom the screening will be done?

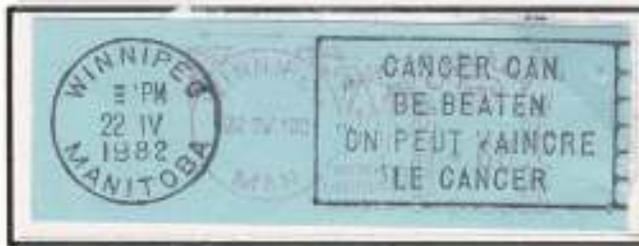
It is highly recommended by the most of the health authorities to use both methods and at least the self-palpation method.

There are special cure/help stations arranged by voluntary organizations or society where the women can have advise and treatment



## 4.2. Cancer screening helps to detect cancer in the uterine cervix and breast

### 4.2.4. How the cervix and breast cancer screenings will be organized and financed



Cancer can be beaten



The cervical and breast cancer screening are done in many countries according to the law prescribed by parliament. The municipalities are responsible to organize the screening without any costs to the women

*Lounais-Suomen  
Patologian Laboratorio Oy*

Puutarhakatu 9a A  
20100 Turku

PRIORITY

029551

post SUOMI FINLAND

30.09.11  
20100

000.68

Pitney Bowes

PB971728

The municipalities are very free to organize the screenings either by them selves or they can bye it from the private local sector. Everythng must be carried out according to the laws of the country in question. Here is a metermark of one laboratory which is dedicated to the screening policy.

*The private laboratory has made a contract of mailing the samples and the statesments of the PAP-smear.*



*Specimen of the EU stamp of Cyprus*

EUROPEAN  
COMMISSION  
B-1049 BRUSSELS

11.3.08

België - Belgique

P.P. - P.E.

B/1957

Moreover there are the regulations of the European Commission. They are guidelines how the European countries should carry out and follow the screenings. If the countries in question follow the guidelines it will be easier to do statistics of the results and thus improve the screenings in EU, if needed.

### 4.3. Cancer needs a microscopical diagnosis and staging

#### 4.3.1. What a microscopical diagnosis does mean?

Cancer (a malignant tumour, a malignant neoplasm) is a disease of many different microscopical types with much different and individual behaviour. Therefore every cancer needs to be characterized carefully for treatment purposes. This includes the **histopathological type** and **size of the cancer**.

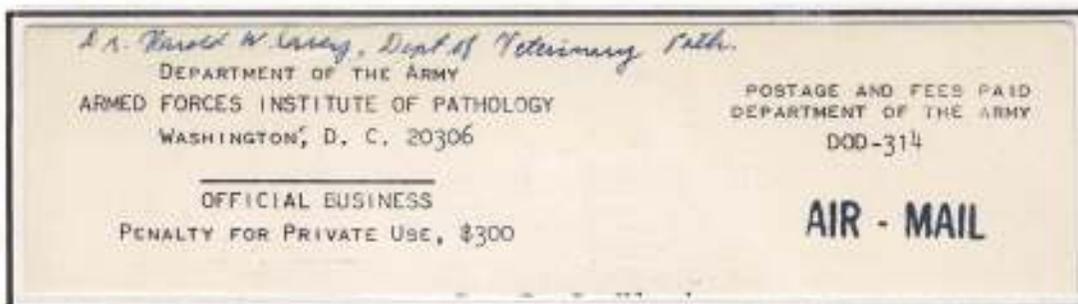


Samples of tumour can be taken by endoscopy from various tubular structures in the body or by open surgery. Sometimes the diagnosis can be done from a lump under the skin. Many times the samples are taken during the operation.



For diagnosis the samples are examined by microscope at the department of pathology. The diagnosis includes a very specific characterization of the cancer e.g. the grade of the cancer (well, moderately or poorly differentiated cancer) i.e. the sensitivity for specific pharmaceutical chemicals and/or radiotherapy which are just the best to treat the cancer in question.

*"Non vivere, valere vital!" in the metermark significates "Life's more than merely staying alive".*



Armed Forces Institute of Pathology of the United States (AFIP) has done decades a great work publishing microscopic classifications of cancers.

This happened years before World Health Organization (WHO) published its series of "Histopathologic Classifications of Cancers". The classification used worldwide allows us to do systematic comparison of incidences of cancer and planning the treatment of cancer by the same way round the world.

### 4.3. Cancer needs a microscopical diagnosis and staging

#### 4.3.2. What the staging does mean?

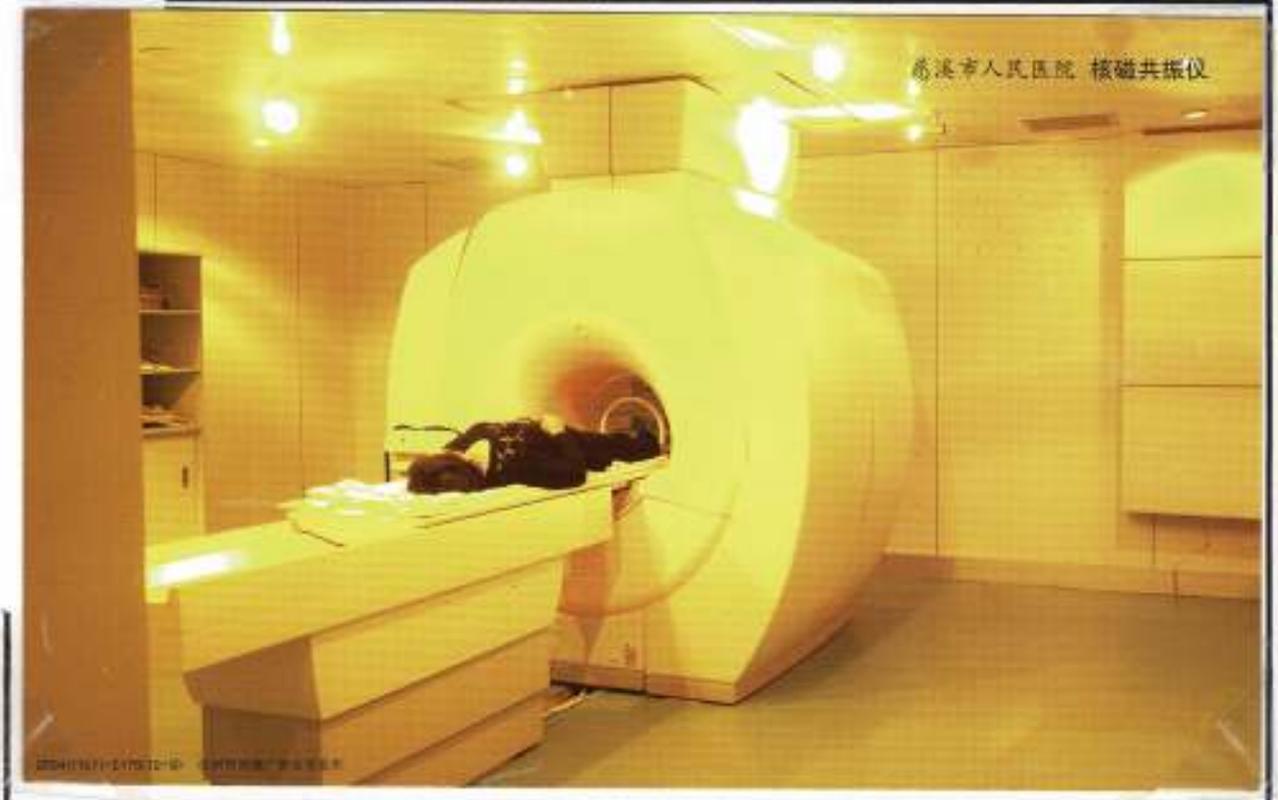
In order to begin the treatment of cancer, the cancer must have the microscopical diagnosis (see the previous page) and must be staged i.e. distribution of cancer in the body. For this many different methods will be used. The staging will be done according to the International Union Against Cancer (UICC) TNM classification.

Dr. W Röntgen discovered X-rays late in 1800. Since then the method and its excellent applications have been used:

X-rays



Magnetic Resonance Investigation (MRI)



Computed tomography (CT) examination. A Chinese stationery and a 1/2 size copy of the back.

Additional methods will also be used:



e.g. Ultrasonic imaging



radioactive particles



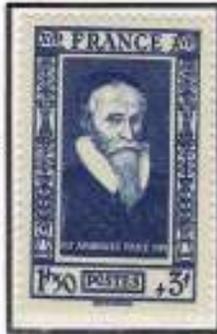
angiography

## 5. Many disciplines are involved in treatment of cancer

### 5.1. Surgery removes cancer

#### 5.1.1. Development of surgery

French physician  
A Paré is regarded as  
the father of the  
Renaissance surgery



and W Fabry the father of German surgery, respectively.

Surgeon E McDowell operated  
successfully in 1809 on an ovarian  
tumour first time in history.

At that time aseptic techniques  
and anaesthesia were unknown.  
Probably by sheer luck the patient  
did not die in the operating room.



Nowadays the operation rooms  
and instruments are clean. The  
patient need not to suffer  
due to anaesthesia.

Moreover the surgeons have lot of  
novel instruments which greatly  
help the operation.

*The sheet margins can be used  
for advertisement purposes*



The surgeon need  
good knowledge of e.g.



anatomy



physiology



pharmacology

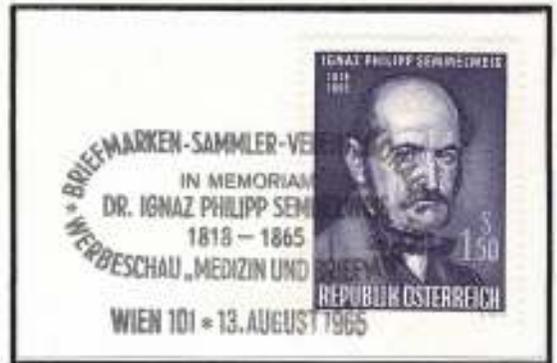
## 5.1. Surgery removes cancer

### 5.1.2. Antiseptic surgery dramatically diminished mortality.

Antiseptic means "free from germs that cause disease".

In the 1846 Dr. Semmelweis empirical discovered that the incidence of puerperal fever and mortality could be drastically diminished by the use of hand disinfection in obstetrical clinics. He did know nothing about the germs which caused the infections.

Many years later L Pasteur showed the relationship of bacteria and infections.



By keeping the operating room, the operation region and instruments clean by carbolic acid (known also as phenol) the mortality diminished furthermore in late 18<sup>th</sup> century. Drs. Lister in Scotland and O Terrillon in France Paris developed aseptic techniques.



Lister is considered by most of the medical field as "the father of modern surgery" because of developing the antiseptic technique and improving the technique of mastectomy.

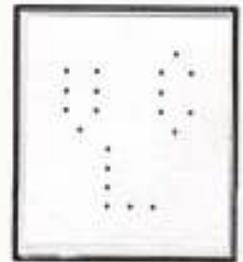


A die proof of the stamp of the Peoples Republic Benin signed by the engraver artist M Monvoisin from the year 1977. The stamp signifies the importance of cleaning the instruments and wounds with antiseptics by the technique of Lister. On the lower left corner one see "Imprimerie des Timbre-Postes Controle".

## 5.1. Surgery removes cancer

### 5.1.3. Anaesthesia helped the patient cope with the surgical operation

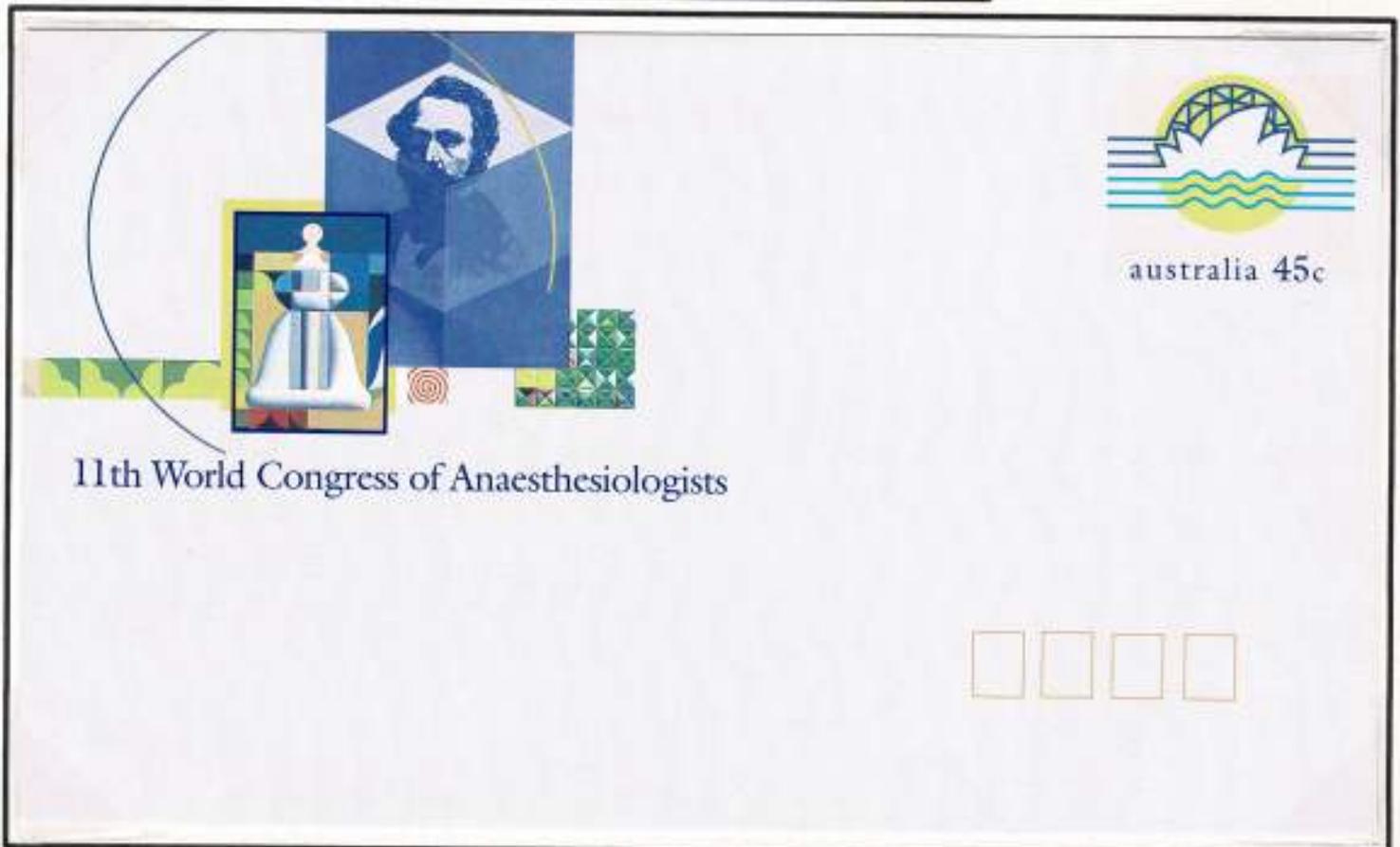
On September 30, 1846 **WTG Morton** performed a painless tooth extraction after administering ether to a patient. Upon reading a favourable newspaper account of this event, **Boston surgeon HJ Bigelow** arranged for a now-famous demonstration of ether on October 16, 1846 at the operating room of the Massachusetts General Hospital. At this demonstration **Dr JC Warren** painlessly removed a tumour from the neck of a patient. This was the first step to make the operations human.



News of the novel use of ether spread rapidly around the world. **University College London** was the first place in Europe where ether anaesthesia was used.



*Higher magnification of the perfin UCL (University College London) in the stamp on the cover of the "University College London".*



The most useful and up to date techniques are distributed in the congresses of anaesthesiologists

## 5.1. Surgery removes cancer

### 5.1.4. Some surgeons have left their names in medicine

Kirschner wires are sterilized, sharpened, and smooth stainless steel pins designed by **Martin Kirschner** in 1909. The wires are still used in orthopaedics for fixation of fractured bones.



Hormone producing tumour in the adrenal glands bears the name **Cushing's** disease



Breast cancers are operated on by the method invented by **William Hallstedt**



**T Kocher** developed surgical instruments



**T Billroth** is the surgeon of cancer of the gastrointestinal region



**Sauerbruch** was a famous thorax surgeon



1990 - 2000  
10 ani de la înființarea  
FACULTĂȚII DE MEDICINĂ CONSTANȚA



Al 20-lea Congres Național de Chirurgie  
CONSTANȚA, 24 - 26 MAI 2000



Destinatari \_\_\_\_\_  
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Codul	Localitatea
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Nowadays many operations can be done by using computer and fiberoptic guided instruments.

## 5.2. Radiotherapy kills the cancer

### 5.2.1. Radiotherapy has been used since late in 1890's.



Above a sunken colour trial proof of Panama stamp of the year 1947 made by American banknote Co.

We have to thank the excellent scientists for discovering radiation. **W Roentgen** discovered x-rays in 1895 and some months later **H Becquerel** found spontaneous radioactivity of uranium salt. **Pierre and Marie Curie** studied further radioactivity and found new elements e.g. Radium, Polonium.. **The first time late in 1890's radiation by x-rays was used to treat Breast cancer.** Ionizing radiation works by damaging the DNA of the cancerous cells. This causes the death of the cancer tissue.



Very soon after some first successful studies with cancer patients the radiation treatment became in practise. The applications of radiotherapy spread very quickly overall in the world. *A stationery of Romania*

## 5.2. Radiotherapy kills the cancer

### 5.2.2. Radiotherapy will be done by the same way everywhere in the world



Before the radiation treatment the teeth must be checked to be in good condition without any inflammation.



Radiotherapy will be given at the departments of oncology



The equipments for treatment of cancer are equal everywhere in the world.

中国邮政明信片  
POSTCARD  
The People's Republic of China



# 海宁市第二人民医院

## HAININGSHIDIERRENMINYIYUAN



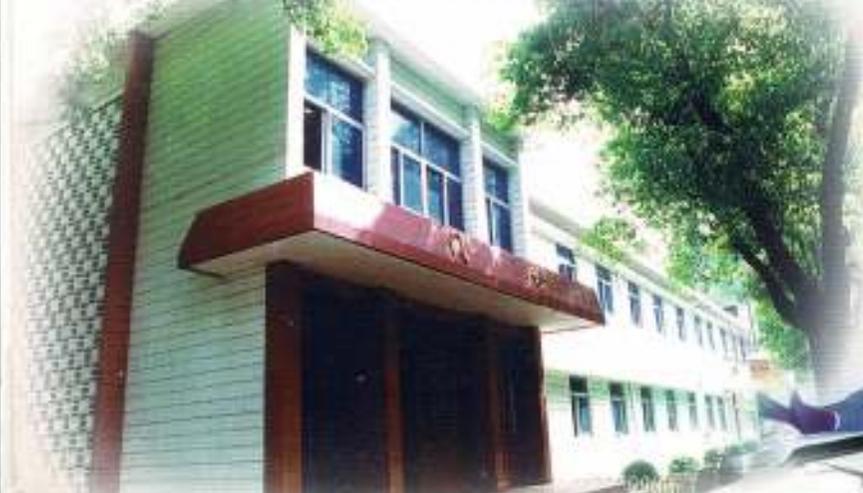
文明单位  
CIVILIZED UNIT



康爱协会  
KANG AI XIE HUI



浙江省肿瘤医院  
海宁市分院



浙北地区肿瘤防治专科医院。设备齐全，技术力量雄厚，具备了放疗、手术、化疗（包括介入化疗）、免疫治疗、中西医结合治疗等抗癌手段。

地址：海宁市东山街104号  
电话：8373-782832 7822740（总机）  
邮编：314400



2000(11)-008

The hospitals, in this case Departments of Oncology, are very similar everywhere in the world, as well.

*Chinese stationery and a 1/2 size copy of the stamp.*

## 5.3. Pharmacological treatment kills cancer cells

### 5.3.1. The effect of the drugs is based on chemistry and biochemistry

In the Middle Ages the Swiss physician-chemist Paracelsus declared that most important duty of chemistry was to make medicine to the patients and not try to make gold as the alchemists liked to do.



Nowadays pharmacology is based on chemistry which is concerned with the discovery and characterization of chemical compounds (drugs) that are used as medicines for treating the patients.



The stamps in the stereoscopic gutter pair shows a copper sulphate, camphor molecule and Erlenmeyer flask. The camphor molecules are different and can be viewed in one three-dimensional picture with a special device or with our naked eyes.

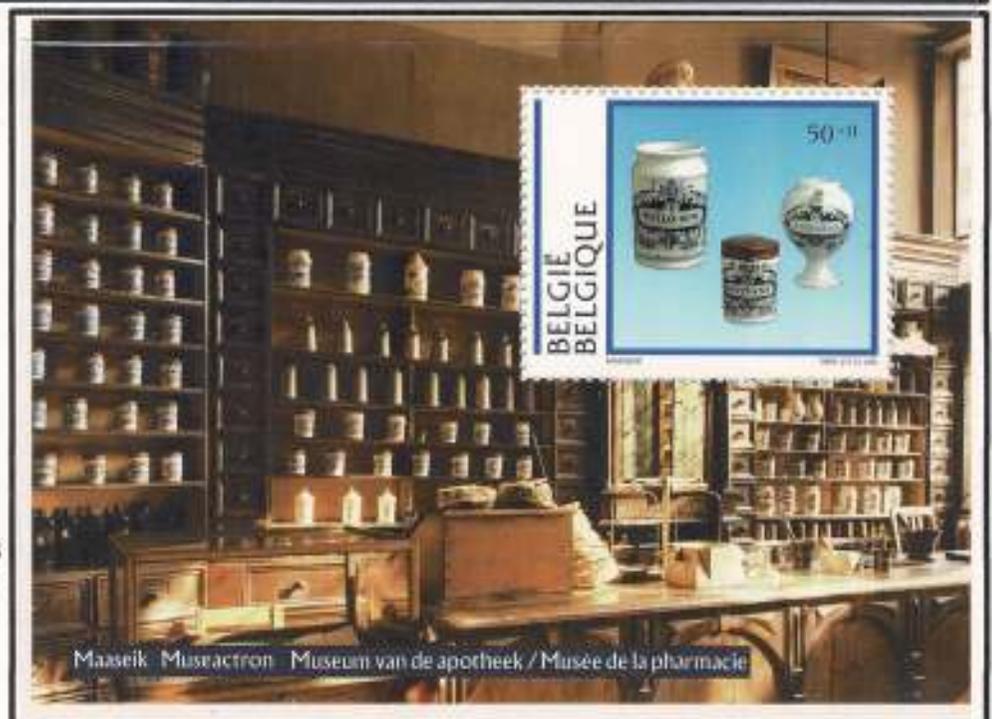
Chemistry and drug Companies have used stamps with perfins. Here the CIBA (a big chemical and drug Company in Switzerland) used stamps with CI perforation between the years 1905-1955.



The equipment and standards in the pharmaceutical Companies have to be of high quality.



There are excellent museums where one is able to explore the history of the first steps of making the drugs.



### 5.3. Pharmacological treatment kills cancer cells

#### 5.3.2. The target of the effect of the drugs is the cancer cell in its entirety



Much time has elapsed since the era of Paracelsus. In addition to chemistry there are many others fields such as physics, medicin with its all disciplines, etc. which helps develop new drugs against cancer.

Treatment targets the DNA in the nucleus of the cancer cell.

However there are other targets in the cells as well.

*Above the card shows a microscopic view of cancer tissue where one can see many cancer cells and nuclei. In the stamp an artist's view of a nucleus of a cancer cell in which the treatment occurs.*

Chemotherapy includes chemical compounds which are given to patient with the aim to destruct the cancer. **Most often the target will be DNA of cancer cell.** The regimen may have one or many different drugs which have different targets in the cell



From \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Attention of R. J. Paw

**BUSINESS REPLY MAIL**  
FIRST CLASS MAIL PERMIT NO. 1521 E. SYRACUSE, NY

POSTAGE WILL BE PAID BY ADDRESSEE

BRISTOL-MYERS COMPANY  
PHARMACEUTICAL RESEARCH AND DEVELOPMENT DIVISION

BOX 188  
EAST SYRACUSE, NEW YORK 13057

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

*Cooperation with pharmaceutic companies and post is working well. A piece of the envelope of the BRISTOL-MYERS COMPANY, New York.*

### 5.3. Pharmacological treatment kills cancer cells

#### 5.3.3. The oncologists use variety of drugs for fighting against cancer

At the beginning of 19<sup>th</sup> hundred **Mustard gas**, a chemical warfare was developed. Its **derivatives are excellent chemotherapeutic agents against cancer**. These were used first time in 1942 against lymphoma.

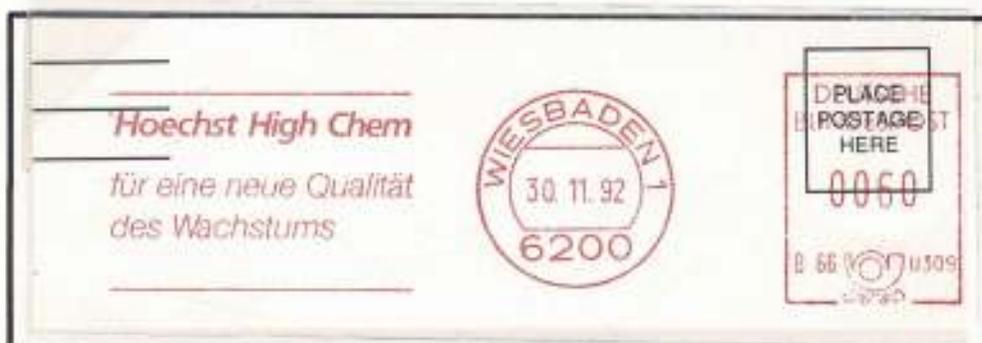


The traditional treatment based on **products from the nature** is still practiced in many places. There is no reason to under value this because ...

...very effective anticancer drugs (taxans) can be produced from The English Yew (*Taxus Baccata*)...



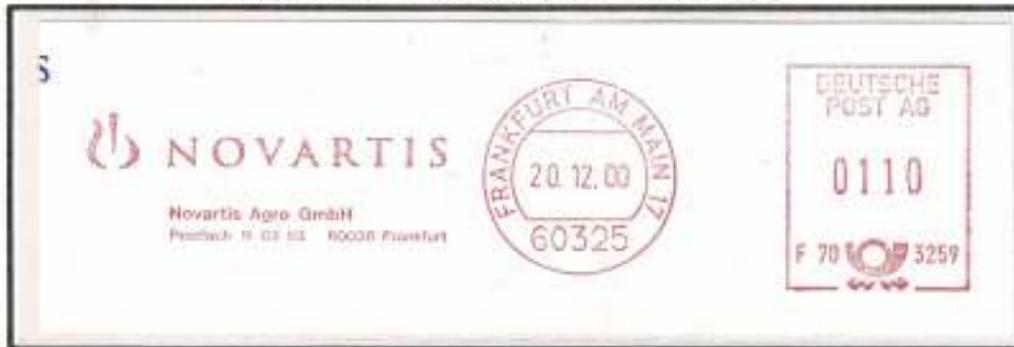
...another plant *Cataranthus Roseus* includes s.c. vinca-alcaloids which also are effective anticancer drugs.



The chemical industry develops continuously and produces continuously new anticancer drugs.

### 5.3. Pharmacological treatment kills cancer cells

#### 5.3.4. Pharmacies delivery the drugs



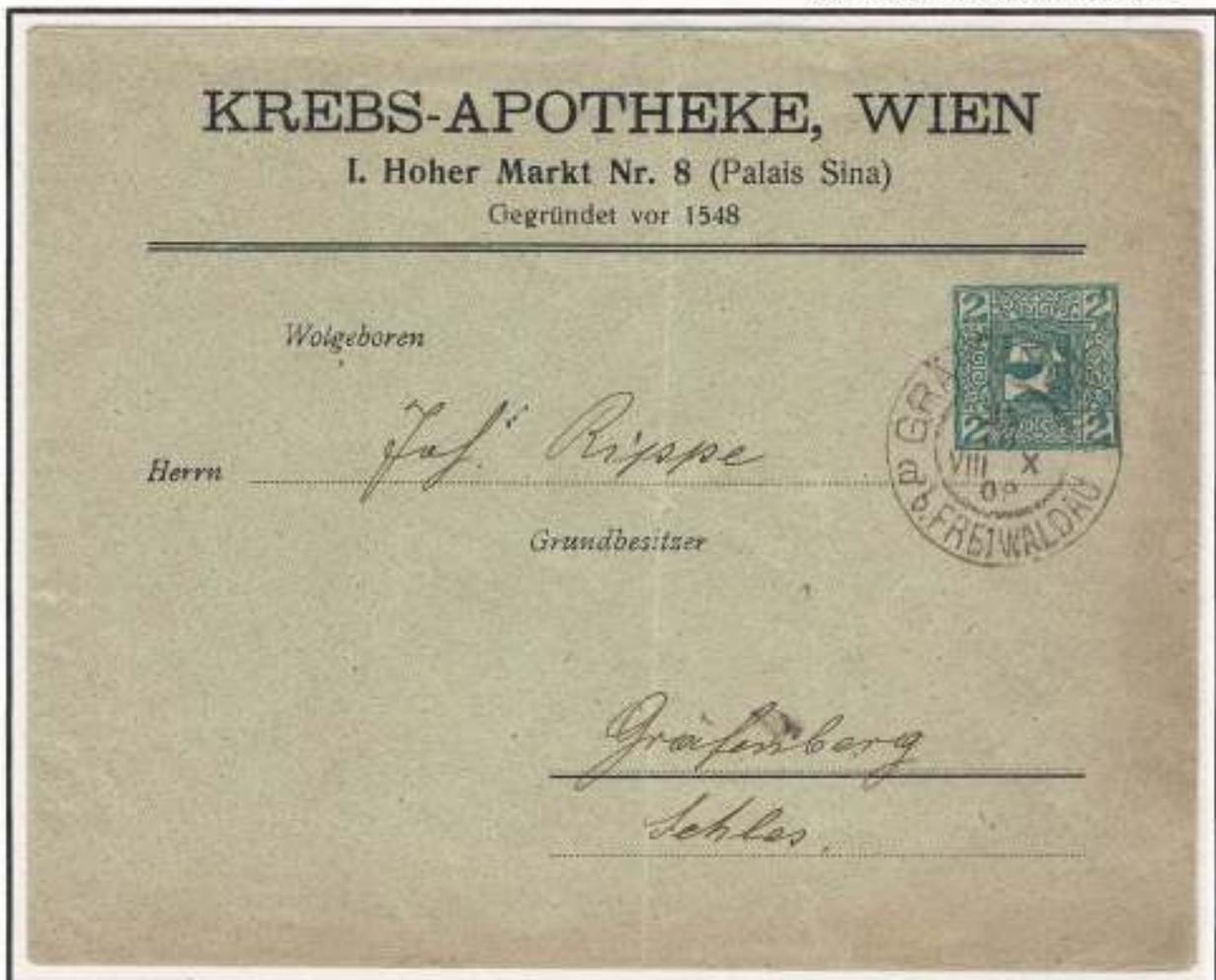
The drugs (medicines) are developed and produced in the drug companies.



Drugs are delivered through pharmacies.  
One of them has existed hundreds of years.



The pharmacologic congresses are forums of further education.



Krebs-Apotheke (Cancer Drug Store) in Vienna dates back to The Middle Ages. It was founded in 1548 by pharmacist Johan Arnold. Later it was the most famous pharmacy in Vienna and the delivery of pharmacologic drugs and homeopathic chemicals for the Imperial Court.

*Stationery from the beginning of 20<sup>th</sup> hundred. For some months ago I sent a letter to Krebs-Apotheke, Wien, which is still running. My aim was to get know more of this stationery but up to now I have received no response from Wien.*

## 5.4. Childhood cancer needs a special competence

### 5.4.1. Cancers of children differ from cancers of adults



The term "childhood cancer" designates cancer that arises in children before the age of 18 years. Luckily in total children have proportionally less cancer than adults representing between 0.5% and 4.6% of all cancers. The cancer registries are doing the statistics of cancer incidences in developed countries whereas in the developing countries the registries are seldom available. However according to WHO and the experience of the health personnel in the World we are able to make some outlines of the childhood cancers. Children have different kind of cancers than adults...



The text on the back of the stamp informs the reader about leukaemia and its treatment.



...majority of childhood cancers originates from blood forming cells and are called leukaemias and lymphomas whereas these cancers are rare among adults. In addition the children have cancers which have their origin in brains, ones, muscles and kidneys. These cancers are rare in adults.



Our duty is to protect the children from pollution which contains carcinogens.

Passive smoking can cause cancer in children as similar as in adults. Therefore we must not let children stay in areas where tobacco smoke is present.



A Meghdoot card from India. Please, see the description of the Meghdoot stationery card on the page 15

## 5.4. Childhood cancer needs a special competence

### 5.4.2. Children need individual treatment and hospitals of their own



The children need a gently care and a special nursing at the local health level...



...in childrens hospital in Finland...



...in Nicaragua.

The text in the back of the stamp explicates the future hospital of the front page.  
"Vista del Nuevo hospital para niños propuesto en Managua Nicaragua"

Artist's die proof of Moroccan stamp from the year 1968 signed by the artist. On the lower left corner one see the stamping of "Imprimerie des Timbre-Postes Controle".



A specialty, pediatric surgery is very important for treatment of childhood cancers.

5.4.3. The diseased children need all help we are capable to give.

UNICEF was established in 1946 by the UN to meet the emergent every days needs of children in post-war World . Its full name was the United Nations International Children's Emergency Fund. In 1950, its mandate was broadened to address the long-term needs of children and women in developing countries everywhere. Its name was shortened to the United Nations Children's Fund. However, UNICEF retained its original acronym. UNICEF helps the children everywhere in the WORLD live better. If the children are healthy and in good condition they are better capable to fight against diseases including cancers.

*5-trips colour trial proof of a stamp from the Republic Mali. UNICEF celebrated in 1966 its 20 years anniversary overall in the World.*



Sometimes during treatment the children need help for bowel activity.



The rehabilitation may need wheelchair



There are special funds for improvement of the treatment of children's cancer



36074

EO.3-14

28.9.66



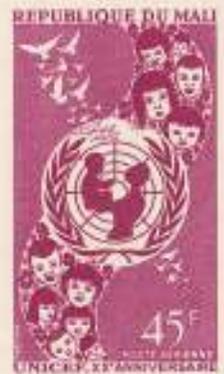
Bull SA



Ven SA



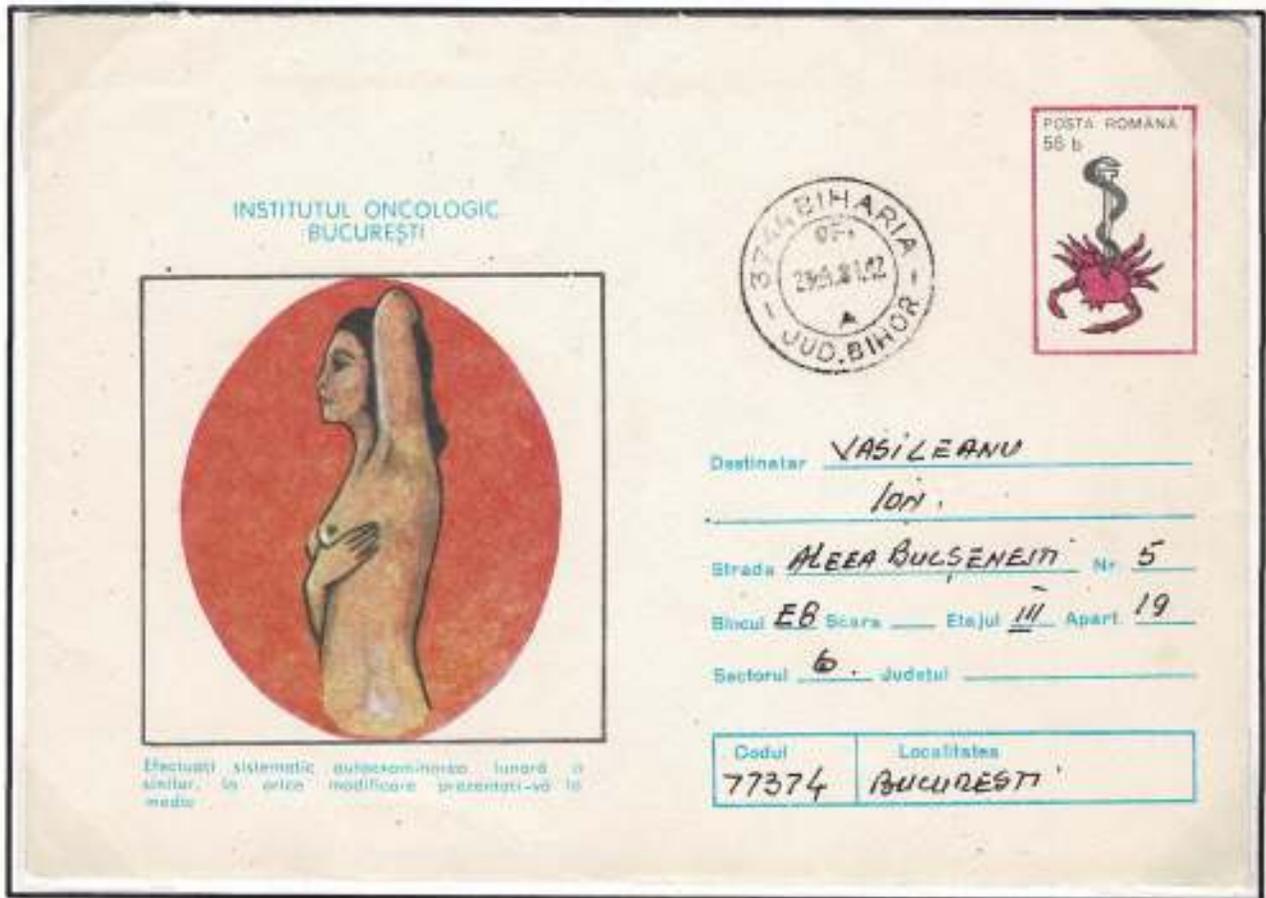
WGL



1

## 5.5. "Tailor- made treatment"

### 5.5.1. What "Tailor-made treatment "does mean?



The best results of the "Tailor-made treatment" of cancer patient are that the cancer will be found in a very early state of its development. This can be obtained by taking care of the early symptoms of cancer such as a lump everywhere in the body, abnormal bleeding, an ulcer which will not cure by itself, a dark tumor on the skin etc. Also it is very important to participate to breast cancer and cervix cancer screenings. Unfortunately for men there are no good cancer screenings, available.



If one yourself or a health staff e.g. a skilled nurse, finds symptoms which are suspicious for cancer he/she is guided to the private or the primary health care units and then very fast into the hospital. There he/she is first diagnosed and treated at the department where the symptoms and anatomic region of the disease fits best...

...there will be many different diagnostic steps before the "tailor- made treatment" starts at the department of oncology. The next page will show the steps.

*Specimen of the Portuguese stamp*



## 5.5. "Tailor- made treatment"

### 5.5.2. What "Tailor-made treatment " does mean? Cont'd

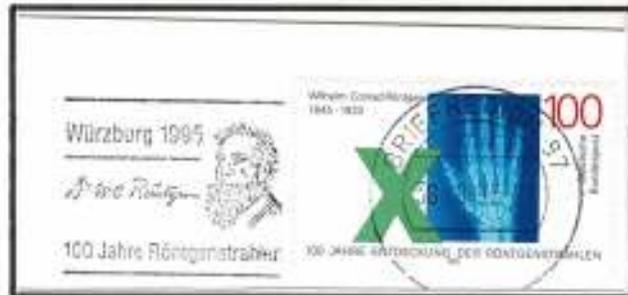
For "the tailor- made treatment" all available information of the cancer of the patient is gathered from other departments such as

**surgery** is needed for removing and staging of cancer...

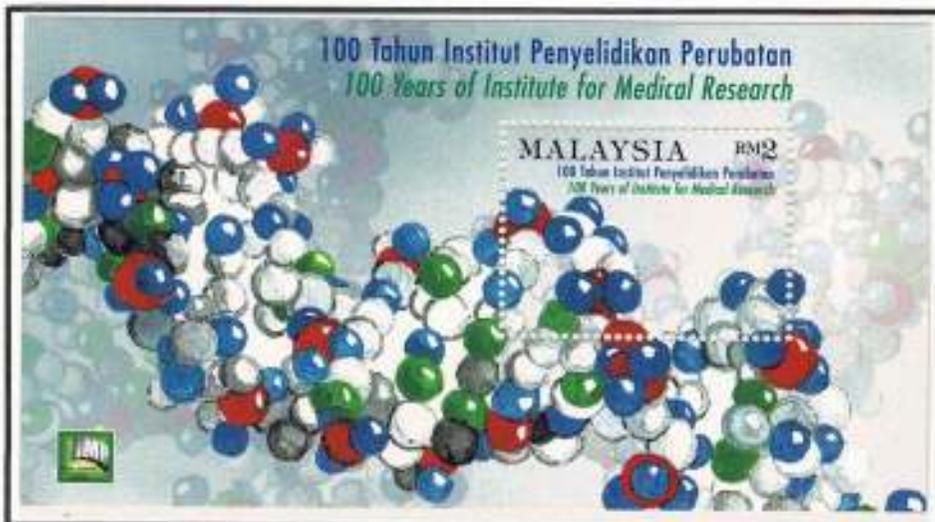


*revaluated stamp of Peru*

...**pathology** is needed for specific diagnosis (e.g. sensitivity of cancer for special drugs) and staging of cancer...



...**radiology** is needed for staging and possibly treating of the cancer...



...and various departments dedicated to e.g. blood and DNA analysis e.g....



...finally the patient will be treated at the **department of oncology**. There the patient will receive very individual treatment "tailor- made treatment".

## 5.5. "Tailor- made treatment"

### 5.5.3. What "Tailor-made treatment " does mean? cont'd

The aim of the "tailor-made treatment" is to kill the cancer. For fulfilling this task science and technology has invented many methods...



Specimen stamp of Japan

Radiation treatments are given with sophisticated methods...



...pharmaceutical companies are producing drugs. Pharmacists are continuously having meetings and conferences for keeping up to date their skill...

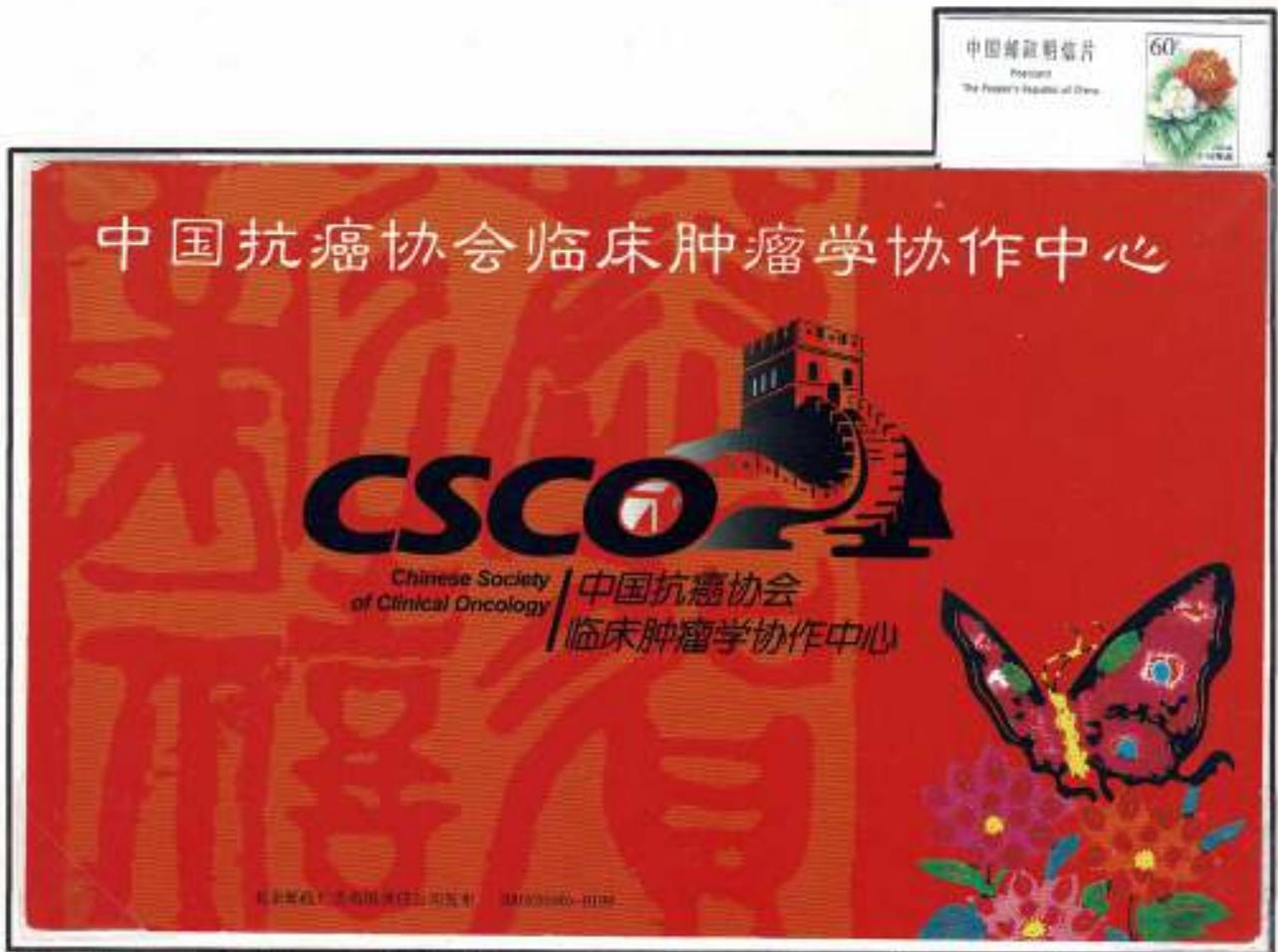


..."tailor-made treatment" is given in older or novel hospitals

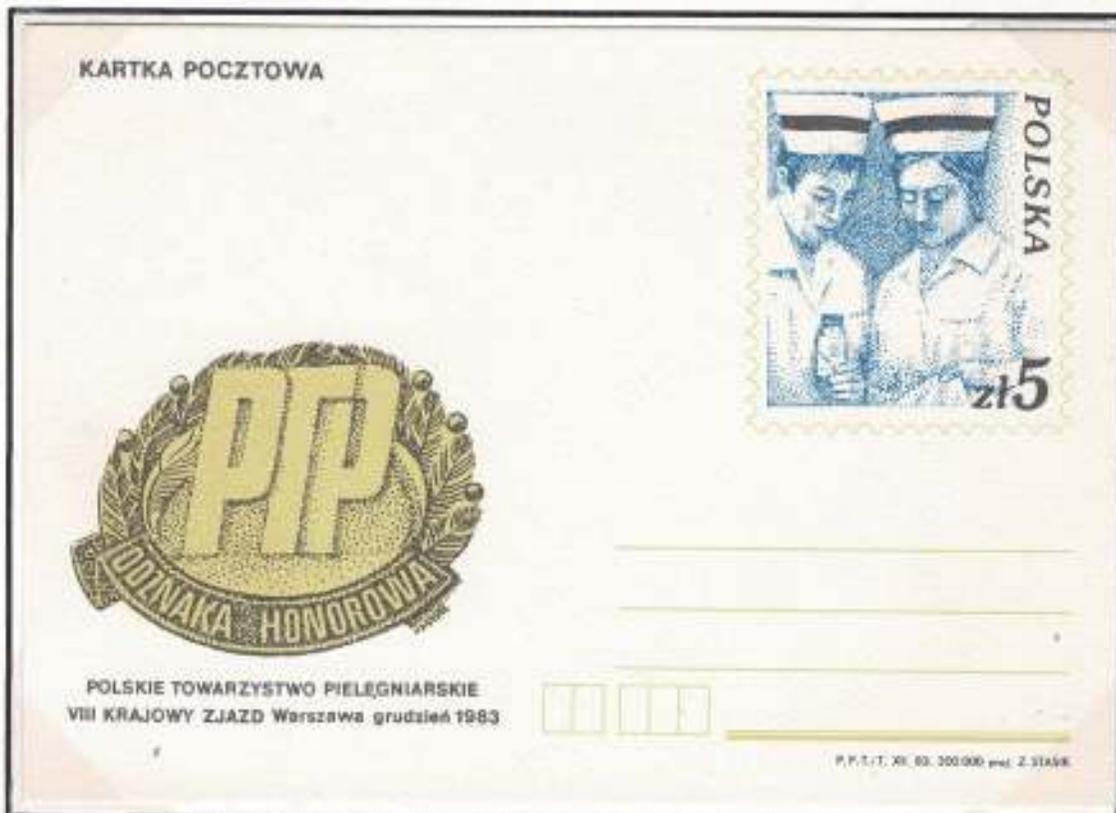


## 5.5. "Tailor- made treatment"

### 5.5.4. Health personal must be up to date.



The labor unions of the oncologists is taken care of the continuing education of the oncologists.  
*A Chinese stationery and a 1/2 size copy of the back*



All health personal are taking part in continuing education.  
*A stationery of the 8<sup>th</sup> National Congress of the Polish Society for Nurses in Warsaw*

## 5.6. What's new in cancer treatment?

### 5.6.1. The ideas and works done in history of vaccination made possible to manufacture nowadays vaccines.

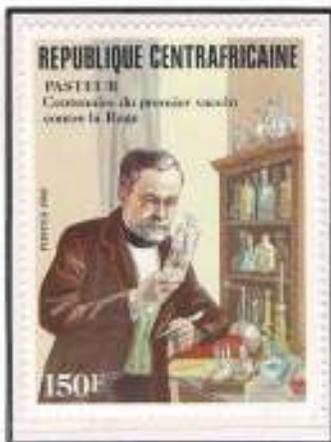
More than thousand years ago, in Asia, practitioners developed the technique of variolation against smallpox. Dried smallpox scabs were blown into the nose of an individual who then contracted a mild form of the disease. Upon recovery, the individual became immune to smallpox. Between 1% to 2% of those variolated died as compared to 30% who died when they contracted the disease naturally. By 1700, variolation had spread to Africa, India and the Ottoman Empire.

In contrast to Asians and Africans who inoculated by blowing dried smallpox scabs up the nose, Europeans and their American cousins tended to inoculate through a puncture in the skin.

Variolation was never risk-free. Not only could the patient die from the procedure but the mild form of the disease which the patient contracted could spread, causing an epidemic.

One observation late in 18<sup>th</sup> by Jenner was important. He found that if dairymaid is infected with Cowpox she will become immune to smallpox. With this observation in mind Jenner did variolation with Cowpox on one boy in 1796. Later on the boy never got infected with smallpox. The boy had developed immunity against smallpox. Disappearing of the smallpox from the world was starting.

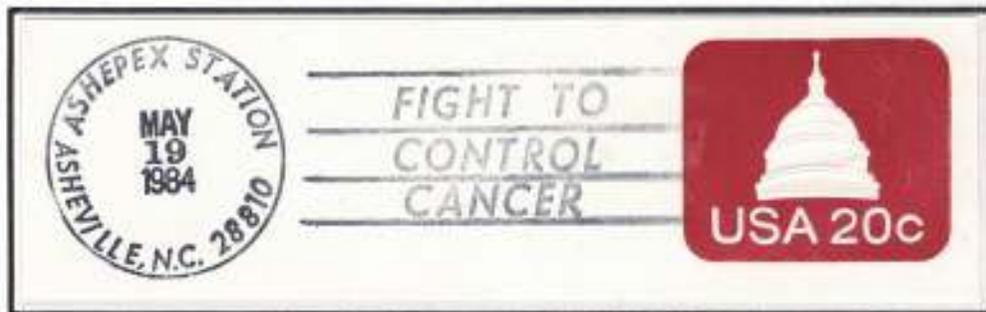
*On the right a proof signed by the artist's Pierre Biguet.  
On the left lower corner One can see the stamping of "Imprimerie des Timbre-Pastes Controle"*



Born on December 27, 1822, in Dole, France, Louis Pasteur discovered that microbes were responsible for souring alcohol and came up with the process of pasteurization, where bacteria is destroyed by heating beverages and then allowing them to cool. His work in germ theory that small germs are responsible for infectious diseases also led him and his team to create vaccinations against anthrax and rabies.

## 5.6. What's new in cancer treatment?

### 5.6.2. Human Papilloma Virus Vaccine (HPV-vaccine) and preimplantation test (only babies without sick gene will be born)



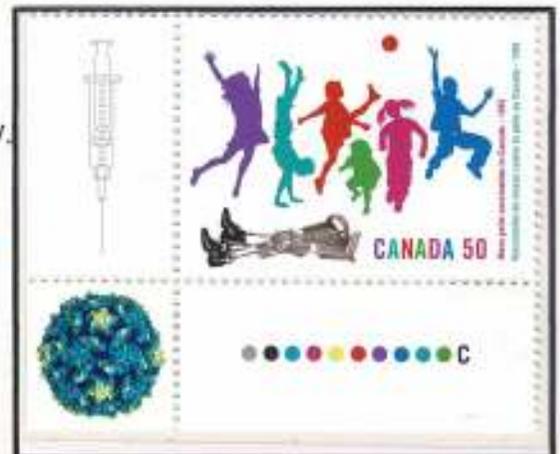
We cannot manipulate the human genome (DNA) but there is other sophisticated methods to prevent cancer:

#### Human Papilloma Virus Vaccine (HPV-vaccine)

The excellent work done in history made possible to manufacture vaccines polio and other viral infections and now vaccines against HPV.



*The sheet margins are excellent places to give information about vaccination*



Apr. 30 years ago it was found that human papilloma virus infection (HPV) causes cervical cancer. Drs. Varmus and Bishop received Nobel Prize because they developed the recombination technique. **The technique is nowadays used for making HPV vaccine. The vaccine prevents the development of cervical cancer. The teenagers must be vaccinated before they start their sexual life. They will be immunized against HPV-virus-infection and the development of cancer will be blocked. There is an ongoing vaccination programs in many countries.**

#### Preimplantation test (only babies without sick gene will be born)



Already in the 19<sup>th</sup> century G Mendel discovered how features of living subjects are heredited.

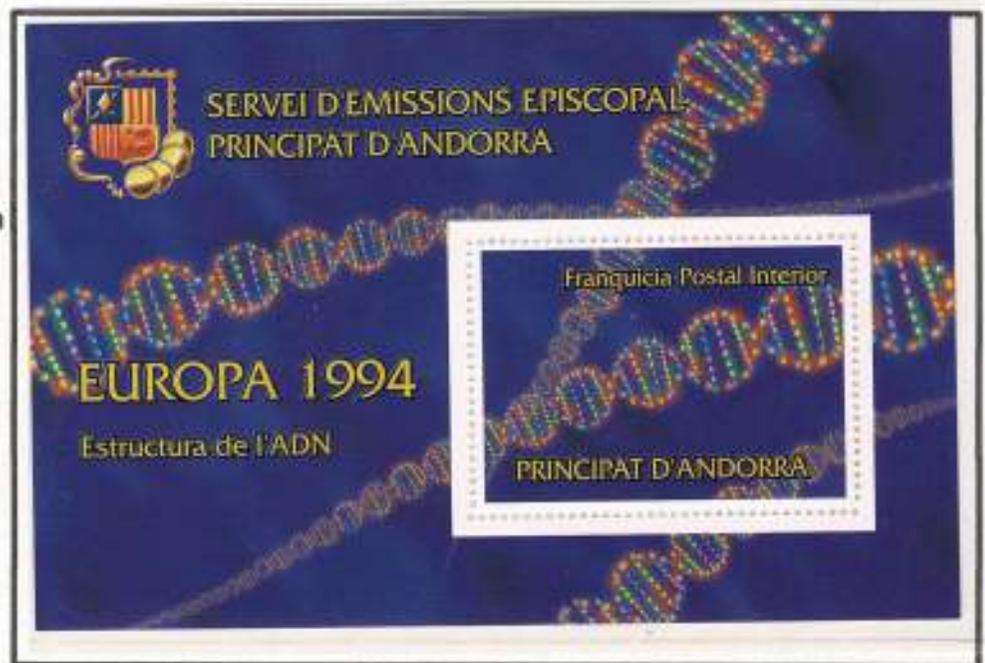
Later the science has developed methods to manipulate the DNA. One example is the Dolly sheep. The sheep was cloned and **instead of one sheep there were two identical sheeps.**

The problem with the human beings is that it is not allowed to touch the human DNA. However the preimplantation test gives a possibility to help the mothers to have healthy babies. **The preimplantation test is a laboratory technique which allow us selecting beforehand only healthy fertilized ovum which will be implanted into the uterus – thus only healthy babies, without the risk of getting breast or ovarian cancer, will be born.**

## 5.6. What's new in cancer treatment?

### 5.6.3. Gene manipulation in future

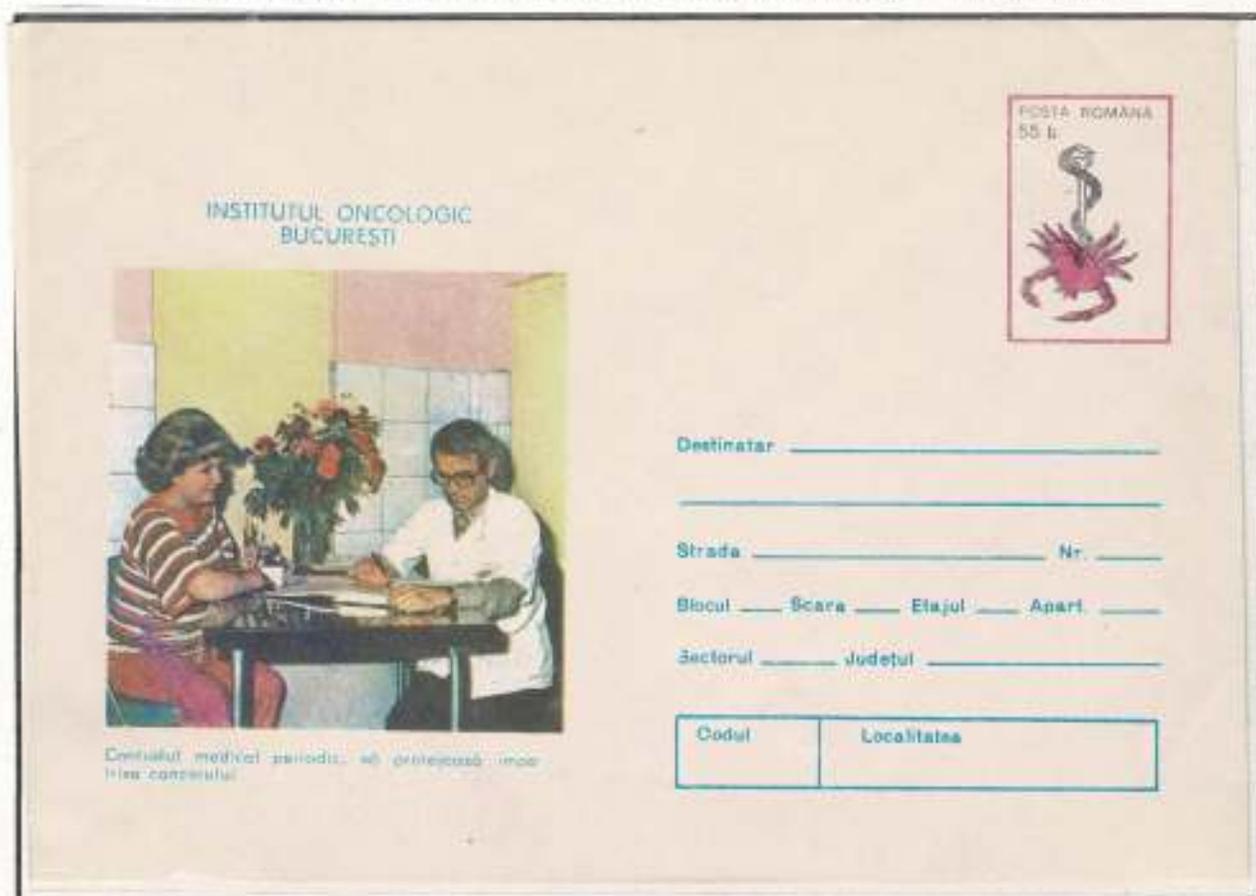
The structure of DNA was discovered in 1953. Since then in 2003 the code of genes of Human Being was resolved and now biochemistry has opened us the methods to repair the errors, mutations or other lesions in the genes i.e. DNA of the Human Being.



The methods to manipulate the Human Genome are already in use in animals but the very important question of the humanity is: are we allowed and ready to manipulate the human genome?

## 5.7. Third sector has an utmost importance in recovering phase of the cancer

### 5.7.1. The patients' care at the individual level is very important.



After the treatment of cancer the training for normal life begins already in the hospital. It starts at hospital and continues by help of the personnel of the voluntary organizations.



Adaptation to normal daily routine continues with the help of voluntary organizations at local and at national level.



Work in the hospital is service to others describes very nicely the patient care.

The family needs also care and understanding after the intensive treatments of cancer.





## 5.8. Alternative medicine (homeopathy) does not suit for cancer patients

### 5.8.2. What homeopathy does mean ?

Homeopathy is based on the theory of treating 'like with like', and is supposed to work by giving you very small amounts of substances that in larger doses would cause the very symptoms you want cured.



Dr. S Hahnemann was the founder of Homeopathy 200 years ago. According his theory diseases can be treated with different chemicals which are diluted up to millions times. However there is no scientific evidence of the curative effect of homeopathy.



The stamp on the left is specimen (Muster). The sheet margin of the stamp on the right includes a figure of Garden sage.

The people have trusted and will continue to trust Sage issues

At the beginning of the 20<sup>th</sup> century like in today's world cancer caused confusing symptoms. At that time neither the people nor the medical personnel knew what was the origin of the symptoms. Thus people were easily misled and tricked by Sage issues which were supposed to help the patients.



The advertising page (upper right) and on the right a 70% copy of the front page of the stationery letter of Sage issues from France. It was sold with only 5 centimes because the paid advertisements. The nominal value 15c + 10c for foreign countries, in this case to Germany.

## 5.8. Alternative medicine (homeopathy) does not suit for cancer patients

### 5.8.3. Numerous plants supposed to have some effect on cancer



Wild marjoram (*Origanum vulgare*) may have preventive effect on prostate cancer



*Momordica charantia*, *Bixa orellana* and *Taraxacum officinale* may have anticancer effect in cultivated cancer cells as well.

*The binomial name is written on the margin sheet.*



There are special conferences which deal with the plants which might have some medical effect on diseases.

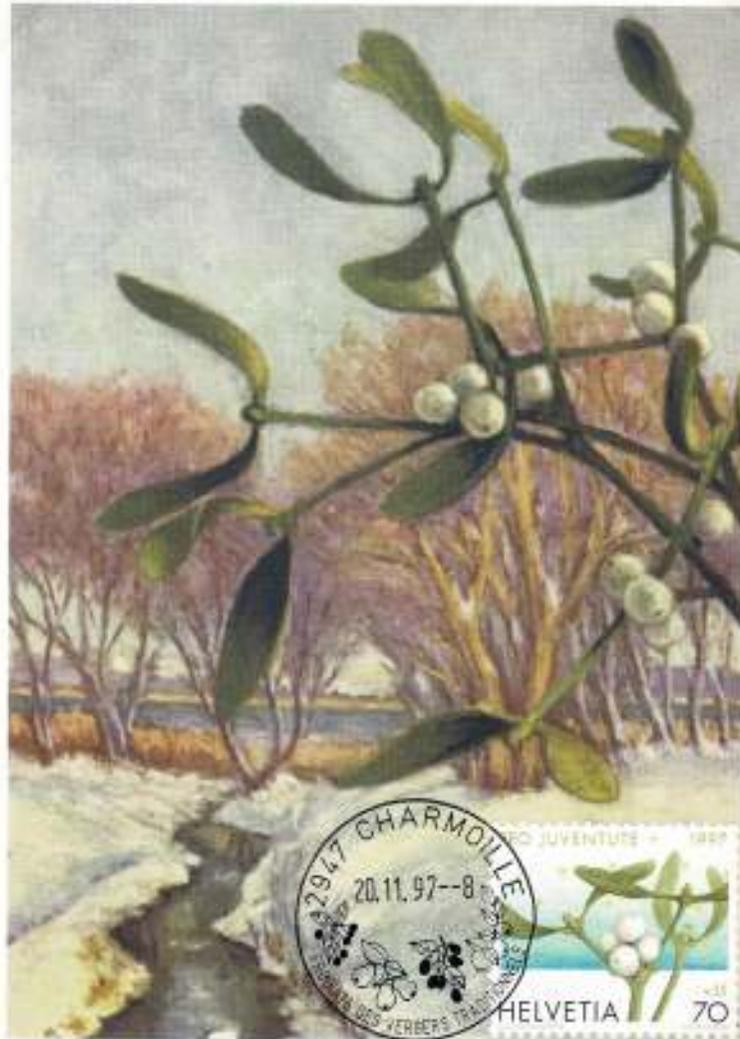
Despite the fact that scientific evidence of the curative effect on human cancer is missing in the natural medicine (tropical medicine etc.), there is no reason to give up. We have to respect the nature and continue investigate the traditional natural products.

5.8. Alternative medicine (homeopathy) does not suit for cancer patients

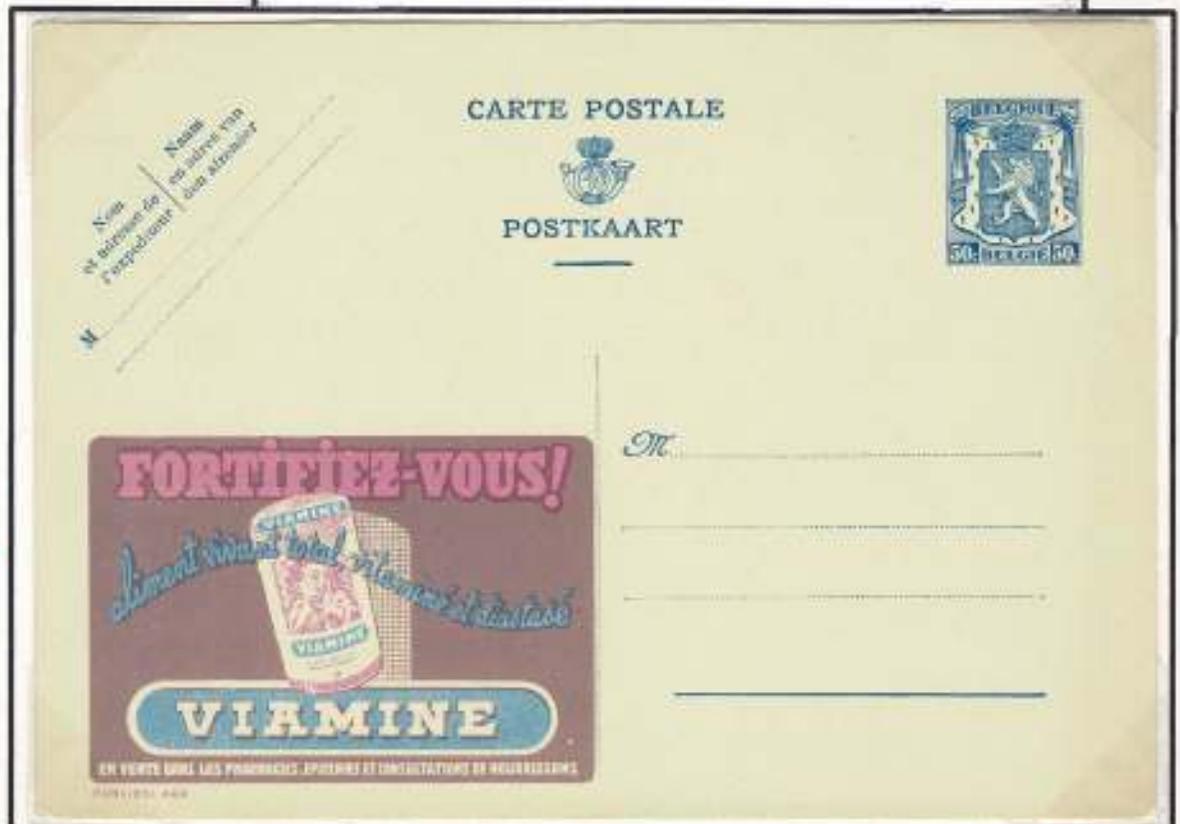
5.8.4. More examples of homeopathy

Mistletoe extracts,  
vitamins...

... Mistletoe extracts and  
vitamins have also been used  
to treat cancer for years.  
However scientific evidence  
of their curative effect is  
still lacking.



*Publibel-card  
N:o 469  
from Belgium.  
Please, see the  
description of  
the publibel-  
cards in more  
detail on the  
page 21.*



## 6. Cancer has a powerful effect on many sectors life

### 6.1. The patients and the family are suffering from cancer

According to WHO's latest statistics from the year 2018 approx. **17 million new cancers are diagnosed worldwide annually**. Childhood cancers are rare, representing between 1% and 4% of all cancers. The four most common cancers among adults are lung, female breast and bowel and prostate cancer whereas leukemia, brain-, s.c. soft tissue tumors, kidney cancers and lymphomas are the most common among the children. The survival of cancer depends on many variables but in general half of the adult cancer patients will survive 5 years (range 98% - 10%). The survival of the cancer of children depends very much of the microscopic type of cancers which are greatly different from those found of adults.



Cancer occurs everywhere in the world...



...and among all people, among young and elder, among women and men.

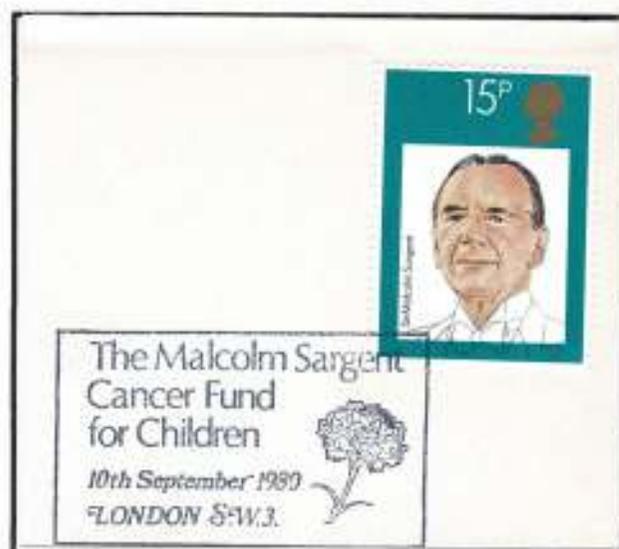
*One penny prepaid Mulready-stationery. This was issued at the same time as the World's first postage stamps by Rowland Hill in the United Kingdom of Great Britain in the year 1840. Stationeries and stamps were issued in one penny and two penny values.*



Cancer affects the cancer patient...



... affects the whole family...



... affects the children who do not realize the danger the cancer will cause.

There are special Funds for children. The Funds help to give special emotional, psychosocial, academic tutoring, special equipment and sometimes emergency financial support.

6.2. The patients and their families (and the world?) are suffering from cancer  
Did the laryngeal cancer of the Emperor Frederick III in 1888 change the world's history?



German Emperor Frederick III on horse in front of the statue of his Father William I in Berlin in 1888.



*A local mail 2 pennies stationery of Berlin.*

The German Emperor William I died on 9 of March in 1888. On same day his eldest son Frederick III was crowned to be the Emperor of Germany. Unfortunately Frederick III was suffering laryngeal cancer and he died of cancer after being nine months in power, in 1888. Frederick III was a liberal reformer, who tried to change Germany into a constitutional monarchy which could have been more responsive to the will of the people.

When Frederick III died soon thereafter, he was succeeded by his eldest son, William II in 1888

*Five pennies stationery of German Empire from the year 1913*



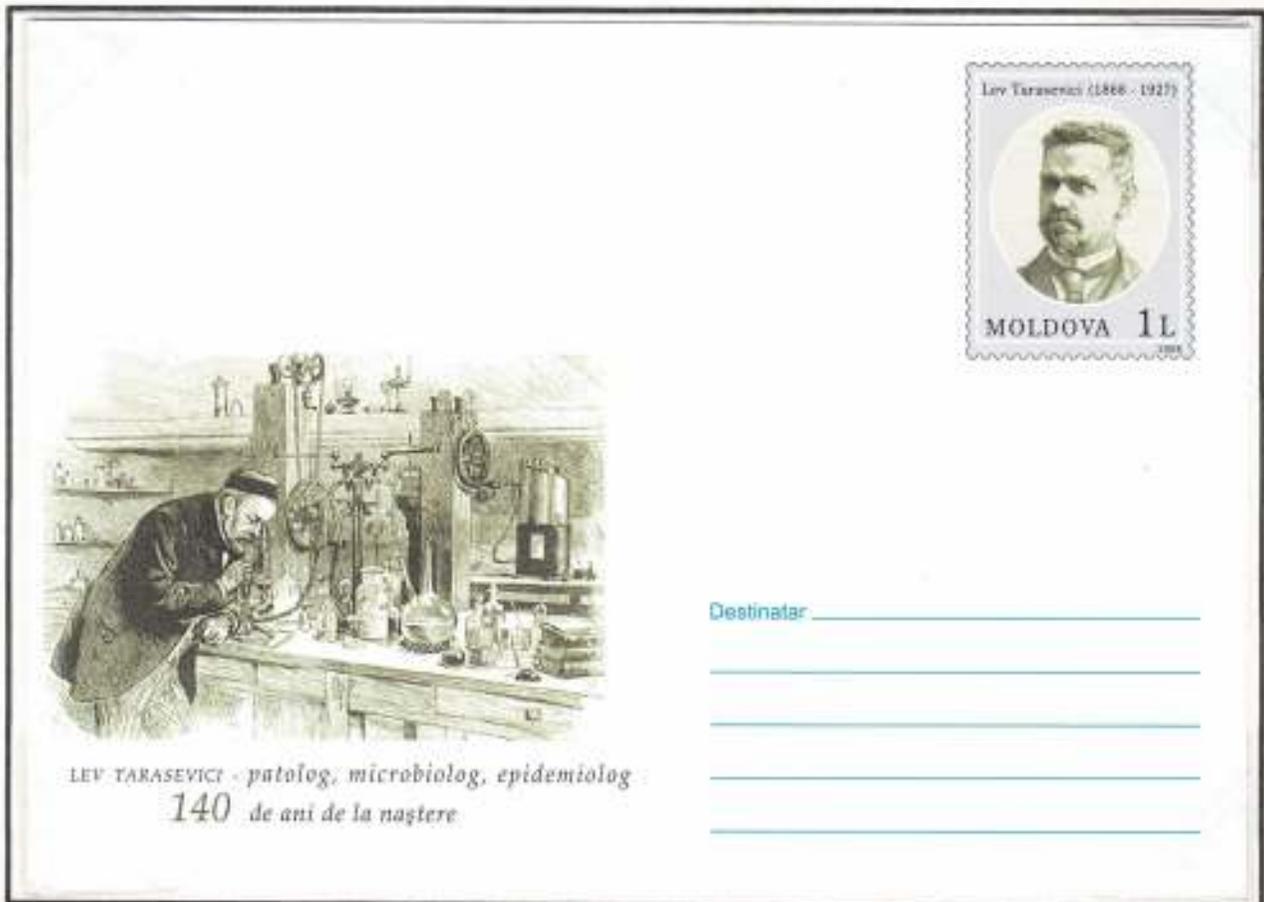
Emperor William II's reign from 1888 until WW I was characterized by relentless military expansion. Germany was continuously arming herself for war against the British Empire and its allies. On June 28, 1914 Archduke Franz Ferdinand was assassinated in Sarajevo. German troops crossed into neutral Belgium. So the WW I broke out in 1914. During the WW I almost 20 million people lost their lives.

**It is inconceivable that Germany would have gone down this warpath if the enlightened, reform-minded emperor Frederick III had lived longer without laryngeal cancer.**

## 7. Cancer research helps to conquer cancer

### 7.1. Cancer research is multidisciplinary

#### 7.1.1. One scientist is not able to master many specialties at the same time



More than 100 years ago one scientist could at the same time be a specialist of pathology, microbiology and epidemiology. Nowadays it is impossible to master many specialties at the same time.



The scientists and laboratories must concentrate in one specialty e.g. such as in radiology



in biochemical research



in pathology



in surgery

Then the collaboration of different specialists will lead to successful results.



The name of the institute refers to the work done inside it.

## 7. 1.Cancer research is multidisciplinary

### 7.1.2. There is a need of good education and many guidelines for doing well science



Special education is a need and a must before one is able to do research. In many places universities and the special faculties are situated very close to each other. It enables a good cooperation between the various specialties...

*An atelier die proof signed by the artist, M Monvoisig*

...cancer research overall in the world is done according to the guidelines of Helsinki Declaration in 1964. It is regarded as the cornerstone document of human research ethic. The meeting of the XVIII World Medical Association was held in Helsinki in 1964...



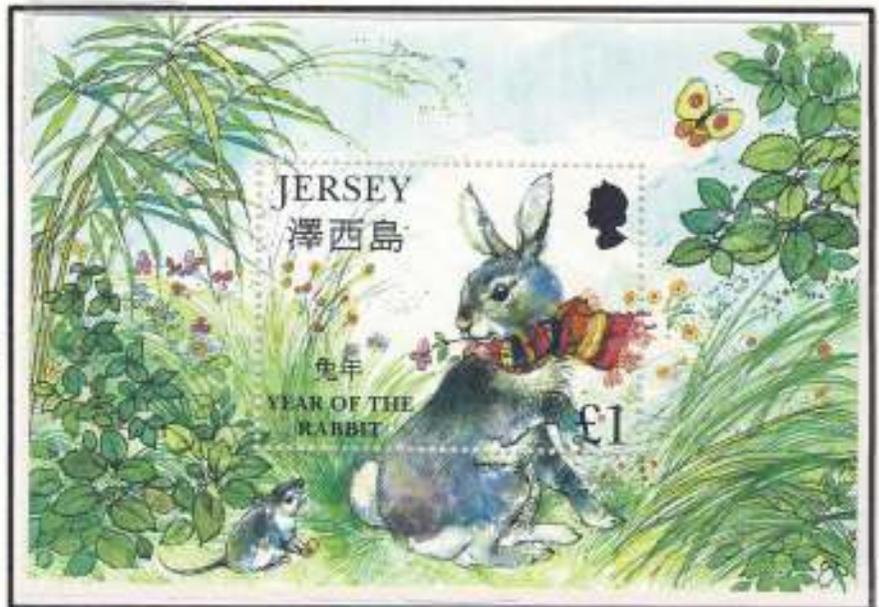
...there are also national medical rules and laws which regulate the research at local level in the universities, laboratories etc.



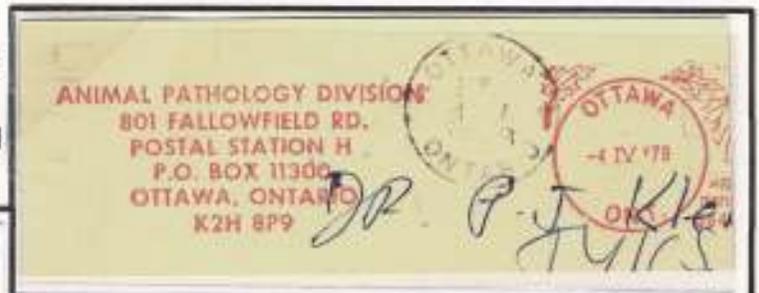
## 7. 2. Experiments with animals help fighting against cancer

### 7.2.1. There are many species of animals in cancer research.

Up to day we have to use animals for testing drugs. Animals used in experiments are e.g. mice, rats, rabbits, apes and dogs.



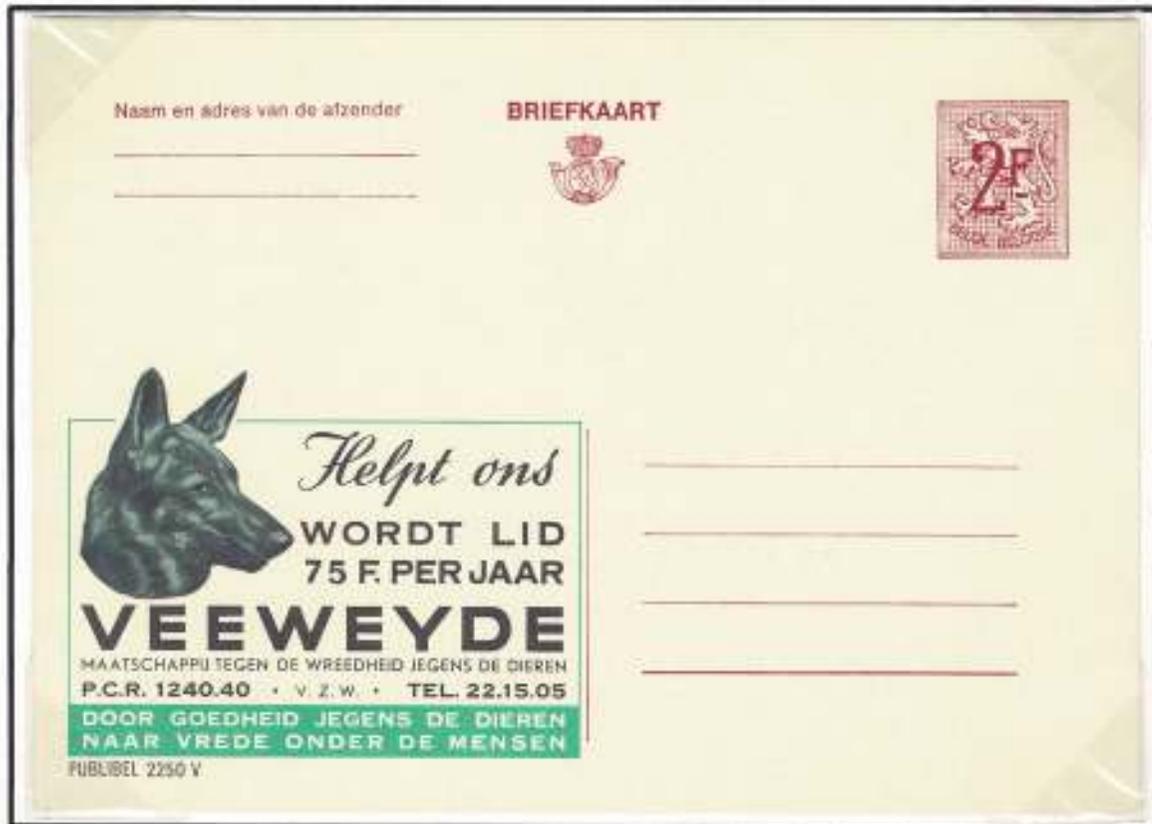
Animal pathology is a discipline which takes care of animals' health. It examines animals for keeping them healthy. If the animals are sick, they will be treated adequately.



Chinese stationery and a 1/3 size copy of the stamp of the back.

## 7. 2. Experiments with animals help fighting against cancer

### 7.2.2. The scent of dogs is useful to detect human cancer – an excellent and new method!

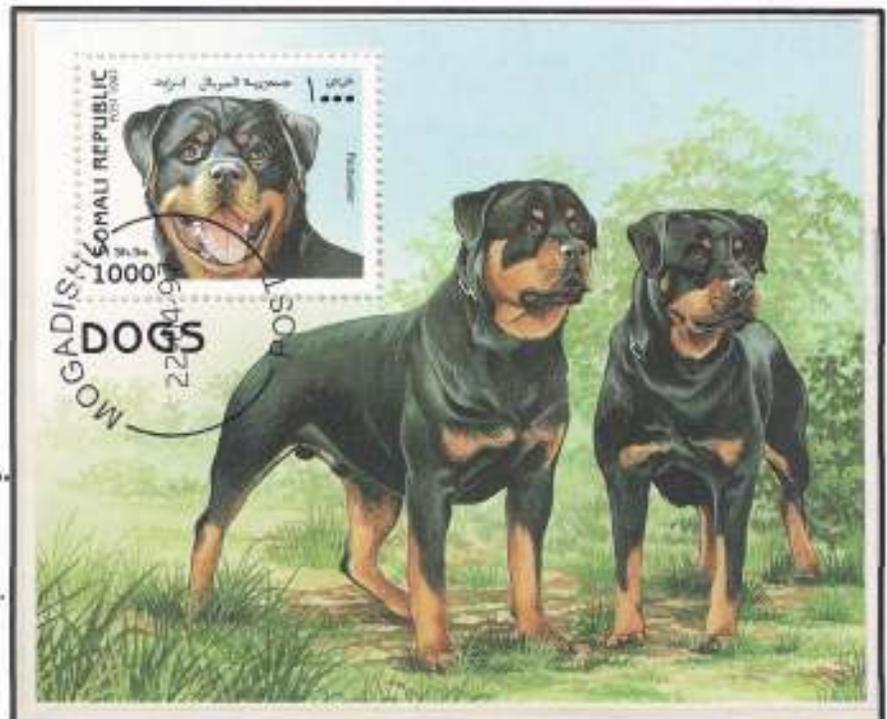


Many studies have concluded that cancer has a distinct smell. It is claimed that dogs can detect some substances on the order of parts per trillion. Dogs can be trained and electronic nose programmed to recognise (diagnose) cancer by smelling patient samples of urine, of blood and breath, but there is still no certainty about what exactly causes the smell. It has been proposed that this ability of dogs can be used to detect human cancers. There are many ongoing studies about this subject.

*Publibel card N:o 2250 from Belgium. Please see the description in more detail on the page 21.*



Science has reached the level of DNA. Cloning of the Dolly sheep is a well-known example. We do have methods to manipulate animals' DNA. May be some day it will be possible to clone an animal with enormous diagnostic capacity. Will this kind of manipulation be acceptable?



## 7.3 New findings of cancer are distributed worldwide

### 7.3.1. In printed form



Johannes Gutenberg was the first European to use movable type printing around 1439. After this the knowledge about medicine could be distributed quicker than in earlier and it reaches the remote places as well.

*A Polish stationery from the year 1997.*

First postal routes were established in the Medieval Age. This helped people communicate and change the information of various things



Causes of death were openly published in printed form on up to late 19<sup>th</sup> century in Canada. Nowadays this kind of information could not be considered good practice.

*Canadian stationery from the year 1892 and a 125% copy of the back side.*

## 7.3 New findings of cancer are distributed worldwide

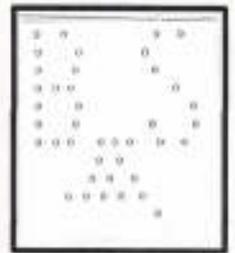
### 7.3.2. In printed and electronic form

*Published July 28, 1914*

**ROSS. Further Researches Into Induced Cell-Reproduction and Cancer**  
VOLUME IV.

A continuation of the Researches in this field, containing a record of further experiments made by J. W. CROPPER, M. B., M. Sc., and AUBREY H. DREW, of the John Howard McFadden Researches. With 10 plates (4 colored), and 33 other illustrations. Cloth, \$1.50.

*This is a special net discount book to the trade.*

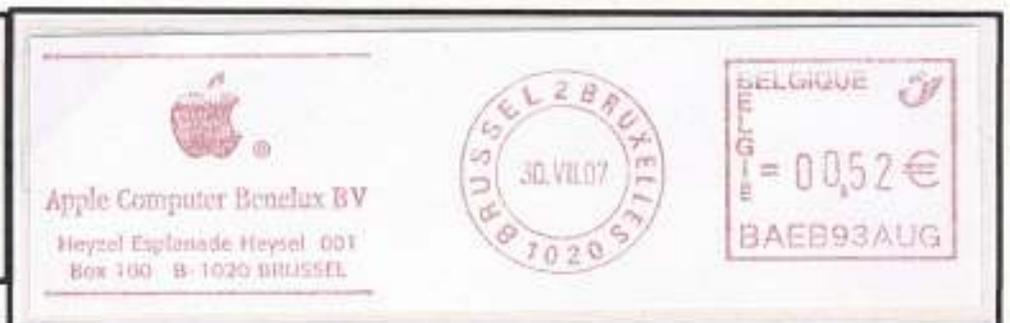


*Higher magnification of the perfin B & S (Blakiston's Son & Co)*

Advertisements of scientific publications are sent to customers and scientific results are published in Journals and requests of reprints are mailed to other investigators.

*A one cent stationery of advertisement of new book published by P. BLAKISTON'S SON & CO from the year 1914. The stationery was sent from Philadelphia to Berlin. The rate abroad was 2 cents. The added one cent stamp includes perfin of P. Blakiston's son & Co. A 125% copy of the back with advertisement.*

*In some countries the scientific material could be mailed with an up to 50% reduced price.*



Nowadays the scientists communicate with mobiles, E-mails etc. Major part of information flows today via satellites and via other means. Personal computer is a need and a must.

## 7.3. New findings of cancer are distributed worldwide

### 7.3.3. UICC and international congresses

The **Union for International Cancer Control** (previously named International Union Against Cancer) or **UICC** is a membership based, non-governmental organization that exists to help the global health community accelerate the fight against cancer. Founded in 1933 and based in Geneva, UICC has a membership of over 1000 organisations across 160 countries. The mission statement is to unite the cancer community to reduce the global cancer burden, to promote greater equity, and to integrate cancer control into the world health and development agenda.



**UICC works closely with key international UN agencies including:** WHO, the International Agency for Research on Cancer (IARC), the International Atomic Energy Agency (IAEA), and the UN Economic and Social Council (ECOSOC).

**UICC keeps international congresses in places around the globe. The most recent information about cancer diagnostics and treatment will be given there.**



The VIII UICC congress was held in Moscow in USSR in 1962



The X UICC Congress was held in Japan in 1966  
*the specimen stamp on the right*



The XII UICC congress was held in 1978 in Buenos Aires, Argentina

## 7.3 New findings of cancer are distributed worldwide

### 7.3.4. Congresses are held by the different disciplines of medicine

UICC is a ceiling organization of different disciplines of medicine especially dedicated to cancer diseases. Moreover each specialties of medicine are holding meetings, congresses etc. at international, national and local levels. So, the latest best innovations will be distributed overall in the world.



Physicians of all disciplines (the physicians who are diagnosing, operating, treating etc.) participate in the UICC congresses. The "teamwork" is the key word for the benefit of the cancer patient



The International 2006 FIGO World Congress took place in Kuala Lumpur, Malaysia, in 2006. FIGO is an International Organization for Gynecologists. It deals with treatments of cancer of the female genitals.



Diagnostic problems will be discussed in the International Congress for Pathologists.

Congress for urologists in Vienna deals with cancer of the urogenital tract



Nurses have their own congresses as well



Radioactive compounds are used for diagnostics of cancer. European Nuclear Medicine Congress in Finland is one forum to discuss the topic.



Statistics is extremely important in research.

## 7.4. Cancer research needs much economic resources

### 7.4.1. Money can be collected by stamps and various types of advertisement

1925 Luxemburg emitted a series of four stamps by which money was collected to three objectives: to Red Cross and to fight against tuberculosis and cancer. Therefore the stamp could be considered being the first cancer stamp in the world.



1928 Sweden emitted a series of five cancer stamps (5, 10, 15, 20 and 25öre) with 5 öre surplus each. The money collected into Gustaf V Cancer Foundation. This also received money from individuals and other organizations. Together 119milj.SEK in today's value was collected. Half of the money was used to build up cancer hospitals in Sweden and the rest of the money was given to foundation named Stiftelsen Konung Gustav V Jubileumsfond...



...one year later Denmark set up a competition of cancer stamps.



Three copies on pink, brown and white paper of unaccepted essays by unknown artist for the Cancer Research Fund stamp.



Finally in 1929 Denmark emitted a series of three cancer stamps of values 10, 15 and 25 öre with 5 öre each in aid of cancer research...

... in 1931 Norway emitted a cancer stamp with 10 öre surplus in aid of the Radium Fund



One can send money into a bank account written on the advertising heading



## 7.4. Cancer research needs much economic resources

### 7.4.2. Money can be collected by various types of advertisements and postmarks

There are many ways to inform people of funding money: surplus can be marked on the cancer stamps e.g. Monaco stamp asks people participate with one franc to **fight cancer in general**...



*On the left 5-strip color proof of the cancer stamp of Monaco in 1975*



...one can target money for a special organ or type of cancer. There exist many possibilities to do this. Here is stamp for **breast cancer research**. With this stamp between 1998 and 2008 approx. 35 mill.US\$ was collected and 50 breast cancer projects sponsored...



...the slogan postmark advertises lung cancer fund...



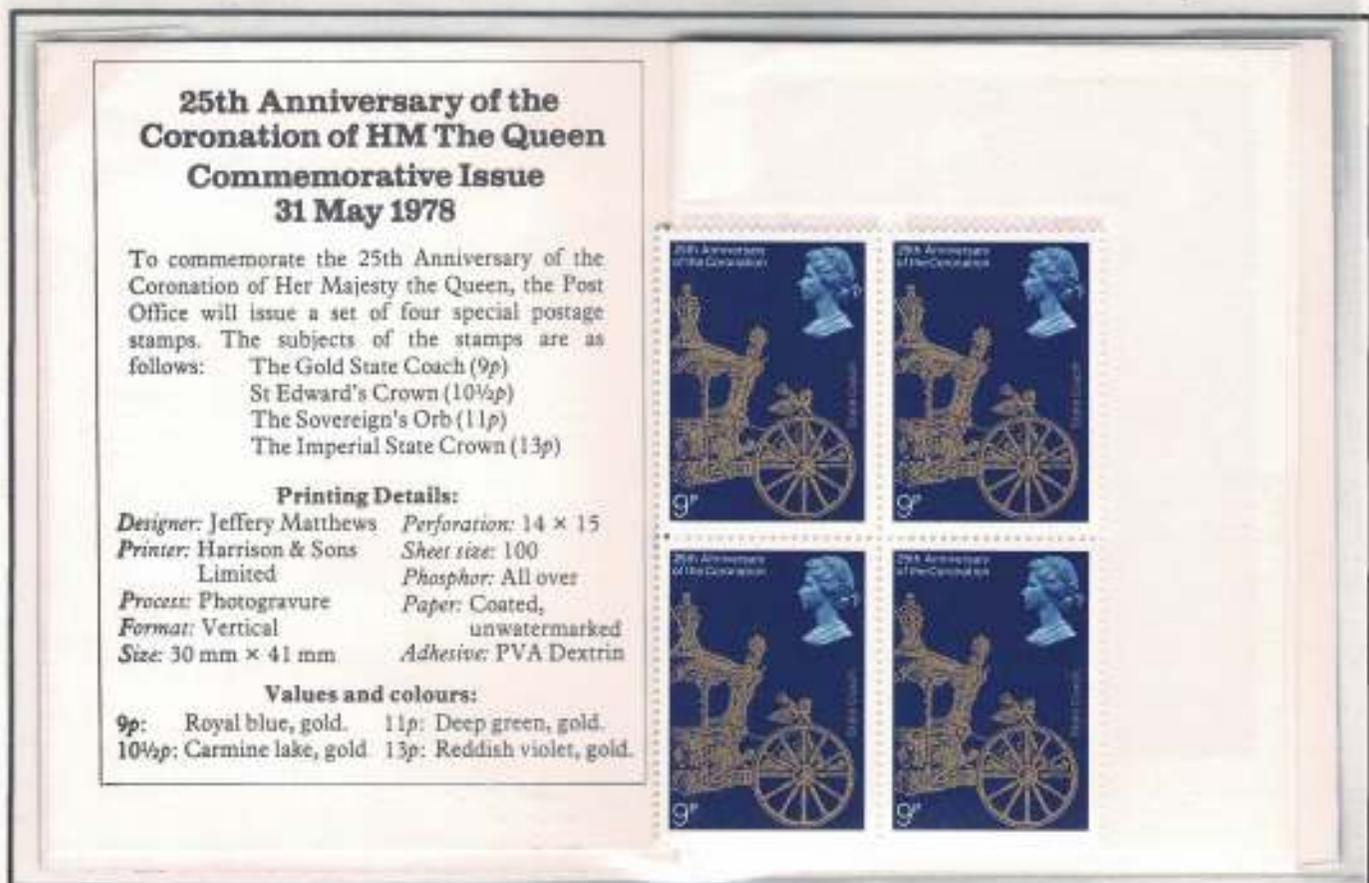
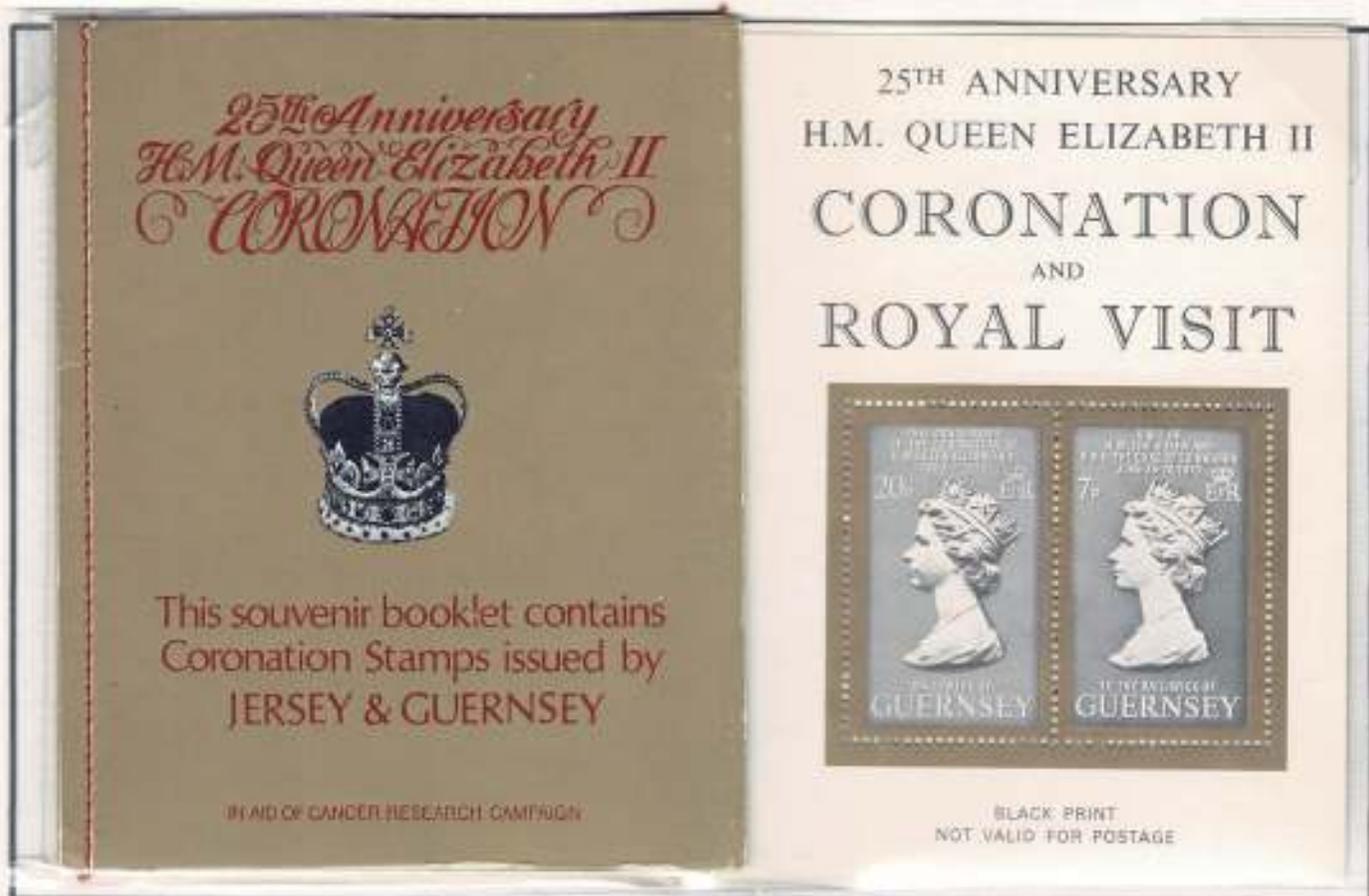
...this stamp was aimed to collect money for fighting prostate cancer...



...one can target the money against leukemia.

## 7.4. Cancer research needs much economic resources

### 7.4.3. Money can be collected by booklets



The souvenir booklet contains "black prints" (sheet uppermost) which are solely for collecting money for cancer and not for postal use. Sheet below contains normal stamps valid for postage.

7.4. Cancer research needs much economic resources

7.4.4. Money can be collected by telegrams

Between the years 1934 and 1966 9 million Dkr was collected by telegrams in Denmark for cancer research. Advertisement of telegrams was included in stampings.



DEN DANSKE STATSTELEGRAF



TELEGRAM FRA NYBORG

Nr 0022/347 15 ORD. INDLEVERET DEN 2/8 1942 15 T. 05M

STYRMAND CARLSEN

HAVNEKONTORET

KØGE

HJERTELG TIL LYKKE PAA DAGEN

FRU SCHEUER OG ERNA OG KAJ

## 8. Why cancer is nowadays under control?

### 8.1. Because we can prevent the carcinogenesis by avoiding risks getting cancer



With increasing well being the people are getting older and thus the risk of cancer increases. One cannot do anything for ageing but **one is able to do much.**



*There are many signs alerting of cancer presented here on the advertising label*



Quit smoking or even better not to start smoking at all

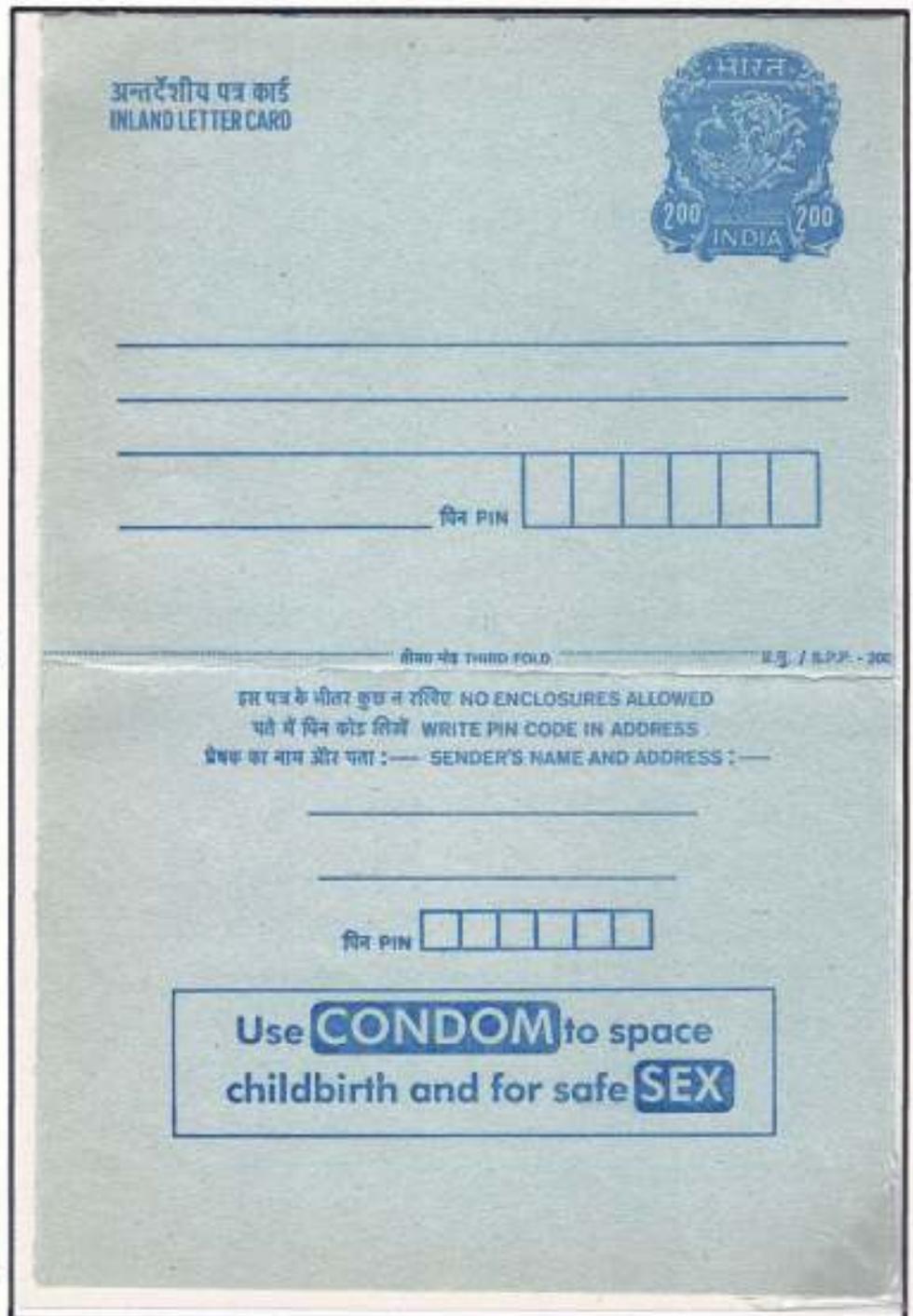


Simultaneous smoking drinking and drug abuse increases much the risk getting cancer.



Obesity and burning skin in the sun are risk factors for skin cancer.

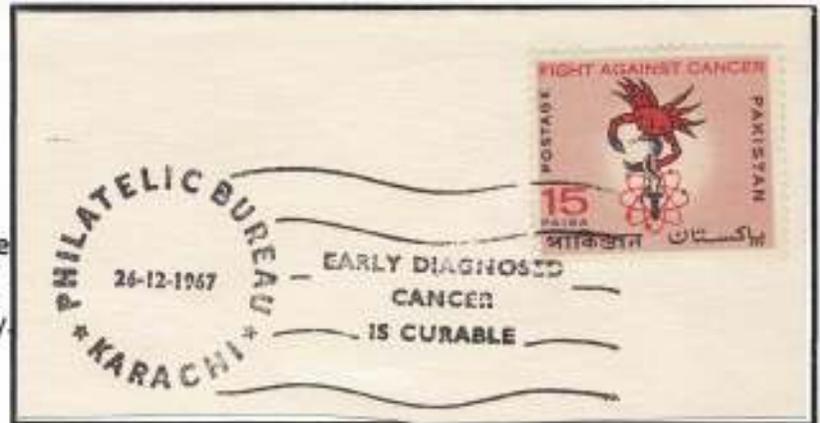
*An inland letter from India Encourages the use of condom for safe sex.*



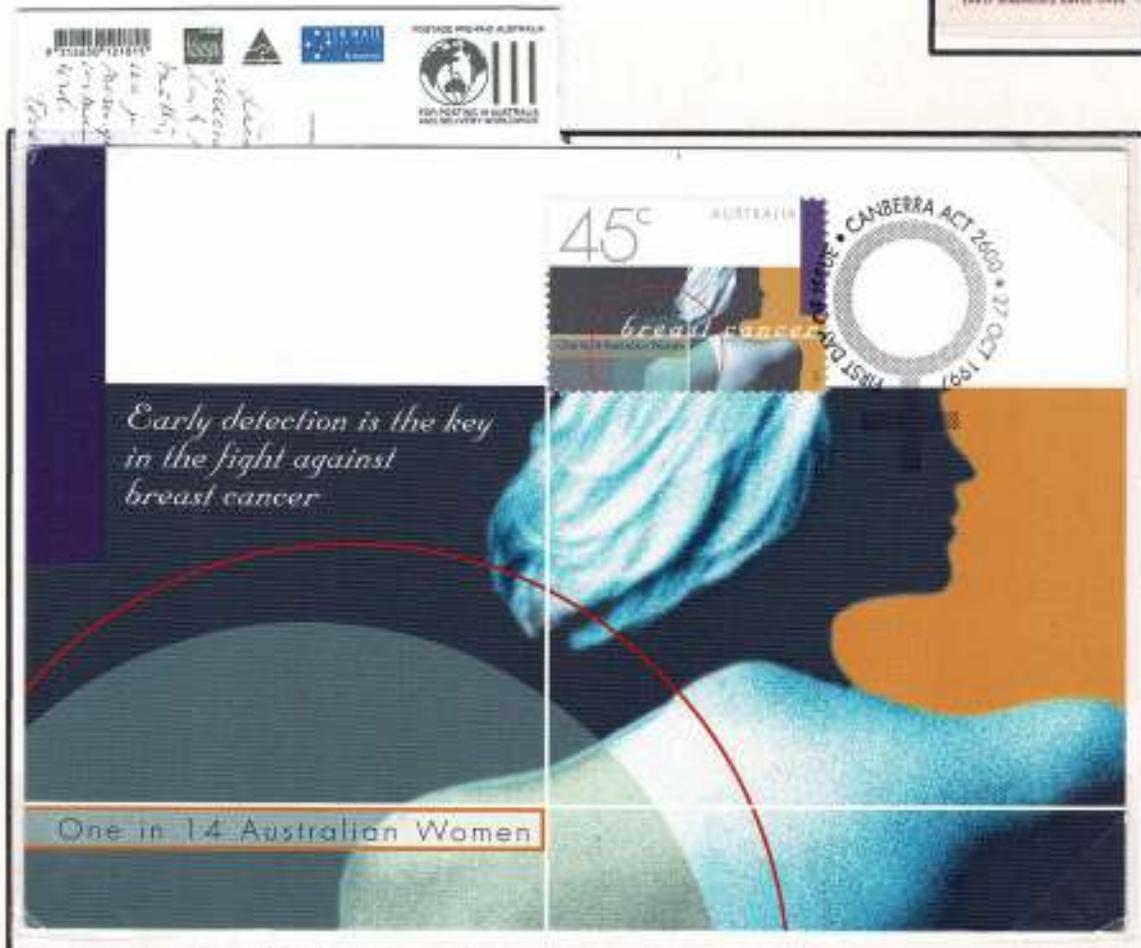
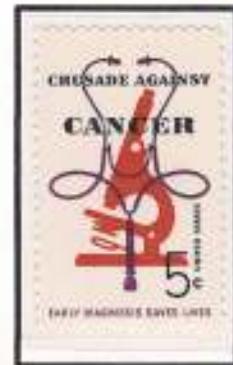
## Why cancer is nowadays under control?

### 8.2. Because we are able to detect cancer early e.g. by cancer screenings

Cancer can be **detected in a very early phase** of its life. During this phase it can be treated before it causes incurable lesions in the body.



The development of cancer in the cervix of the uterus will be prevented by avoiding unprotected sex. If one has infected by Human Papilloma virus (HPV) the development of cervical cancer might be under way. No problem. With the regular and organized **screening by pap-smear**, one can detect the premalignant lesions in the cervix caused by HPV infection. Both of those can be excellently treated and thus the development of cancer prevented.



**Breast cancer screening by self-palpation and mammography** are the best screening methods. With these breast cancer in a very early phase can be found and thus treated before it has grown so large that treating is very difficult.

*Stationery from Australia and a 1/2 size copy of the back.  
"Postage pre-paid Australia for posting in Australia and delivery worldwide."*

# Why cancer is nowadays under control?

## 8.3. Because we are able to characterize cancer in an effective way for "tailor- made treatment"

For "Tailor-made treatment" we have to know the diagnosis and staging i.e. distribution of the tumor in the body. The three traditional pillars of cancer treatment are surgery, radiation therapy and chemotherapy.



surgery



radiation therapy



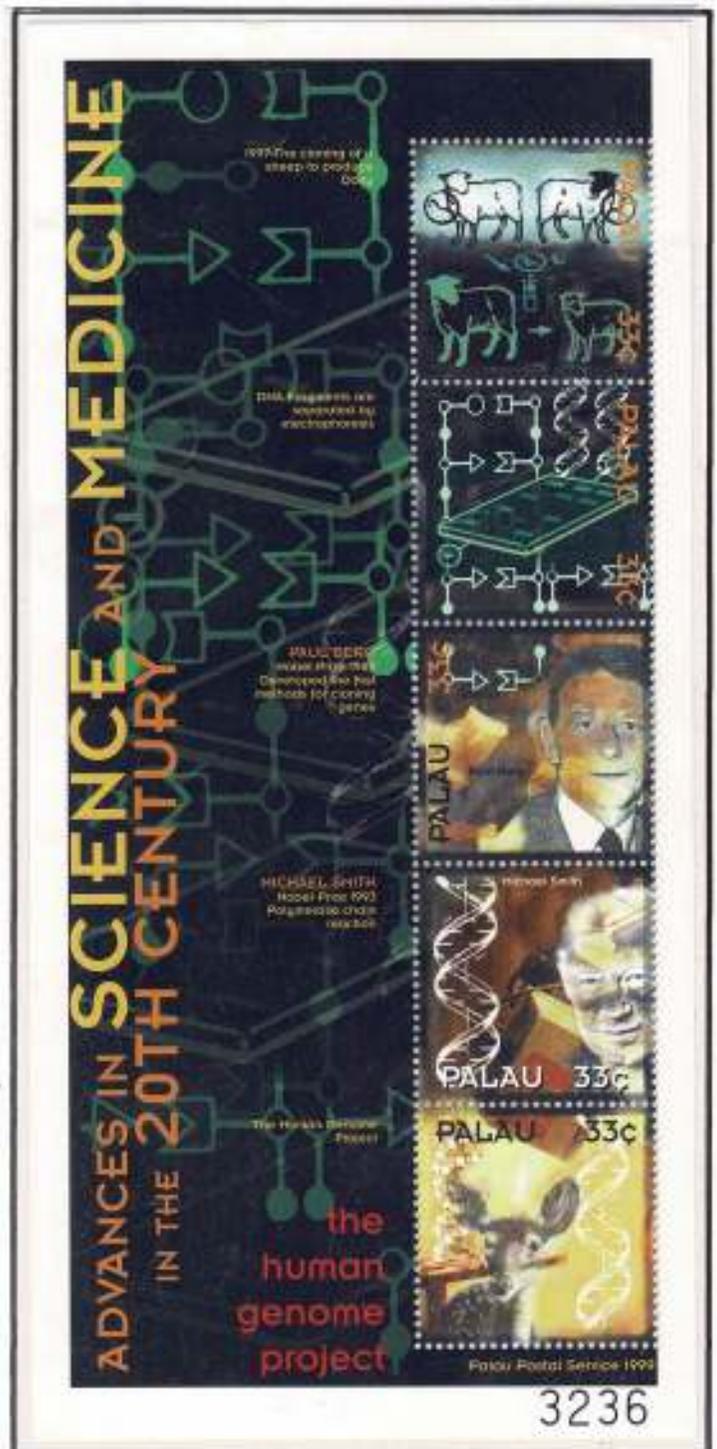
and chemotherapy



Moreover for the "Tailor-made treatment" the characterization of the cancer goes to the level of DNA. This means the way to genetic engineering in future. This needs a very careful discussing about the legal, ethical, and religious questions..

The National Human Genome Research Institute's "Ethical, Legal and Social Implications Research Program" was established in 1990. It is an integral part of the Human Genome Project (HGP) to foster basic and applied research on the ethical, legal and social implications of genetic and genomic research for individuals, families and communities.

ALL ABOVE MENTIONED MATTERS ARE AIMED TO WELL-BEING OF THE PEOPLE



## Why cancer is nowadays under control?

### 8.4. Because excellent survival and recovering give hope to all cancer patients

Most of the children with cancer of blood forming cells are cured. The same is true for the boys with testis cancer. **So, after the treatment the children are ready to continue their daily play.**

*On the right dye proof from France 1945 signed by the artist Achille Ouvre*



The survival of many adult patients is excellent because of early detection of cancer and "tailor made treatments". **Thus people can continue their normal daily activity.**



Last but not least **the third sector** has done and is doing a great job in helping patients to return back into normal life. *The stamping on the wrapper of Queensland Cancer Fund emphasizes the importance of research, service, treatment and education.*