

**Conclusion:** The decision modality is mainly related to the place of work, when the therapeutic attitude depend on personal characteristics. Until 1990, multiple therapeutic options for rectal cancer were performed in France. Now, the argumentation is rather directed on the choice of CT after the standard RT-SU treatment. Results from the ongoing controlled studies will help enlightening the right use of CT. Yet, intention toward hypothetical cases and real practice are different; a practice survey should probably show more disparity in treatments.

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POSTER

### Time trends in survival between 1978-84 and 1985-89: Cracow cancer registry experience

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The data on survival come from the population based Cracow Cancer Registry which was established 30 years ago – in 1965. The first Polish survival study using materials from our Registry was published in 1977. Since 1978 the collected information have been computerised, which was of special importance for usage in analysis of a computer package for survival studies prepared by T. Hakulinen and all. All cancer patients are followed-up through death certificates obtained from the Local Statistical Office.

The Cracow Cancer Registry was the only Polish Registry participating in Eurocare-1 study (1978-84). Across the spectrum of cancers our survival rates were among the worst, being significantly lower from European mean for: breast, corpus uteri, colorectal cancer for both sexes and stomach, kidney and leukaemia for males. Comparison of our data from 1985-89 with survival rates 1978-84 revealed significant improvement of survival rates only for breast and corpus uteri cancer. However, even these rates were still below European mean (1978-84). The reason for this discrepancy seems to be the fact, that Cracow patients still come very frequently with later-stage disease and adequate early detection program does not exist.

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POSTER

### Changes in the incidence and survival rate of cervical cancer in patients under age of 30 years

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**Purpose:** To analyze clinical data of young patients with cervical cancer in the Dept. of Obst. & Gynecology, University Med. School of Pécs over the past 44 years.

**Patients and Methods:** Between 1952 and 1995 there were 6202 patients treated with cervical cancer. 210 patients were under age of 30 years. The treatment protocol was the same, regardless of the age of patients, based on the clinical stage of the disease: low dose rate brachytherapy and surgical treatment, or complete radiation therapy-brachytherapy and external beam irradiation.

**Results:** The incidence of cervical cancer of all patients has not been changed, however among young patients there was a gradual increase in the incidence from 1975, which may be explained by the accumulated occurrence of predisposing risk factors. In stage I, the five-year survival rate is the same between the two age groups/below and above 30 years/but in advanced cancer/stage II, III, IV/the 5-year survival rate of young patients is much worse.

**Conclusion:** The increased number of young patients with cervical cancer may be explained by the accumulation of risk factors and environmental hazard. The poor prognosis is probably due to the fact, that tumors in young patients show more proliferative tendency, and the ratio of anaplastic squamous cell or adenocarcinoma is higher.

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POSTER

### Types of diet and breast cancer risk among native and immigrant females in upper Silesia region, Poland

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**Purpose:** Evaluate of the risk relative (RR) incidence of breast cancer among natives and immigrant women taking into account the 3 types of diet.

**Methods and Materials:** The 328 cases were divided into two groups: 1. Native Upper Silesians (214 i.e. 65.2% of the total) – a stationary population

of women who had been born and lived all their lives within the limits of Upper Silesia. 2. Immigrants – women who had moved to Upper Silesia from various regions of Poland – 114 cases (34.8% of the total). The 585 controls were divided as follows: 405 (69.2%) – natives and 180 (30.8%) – controls.

The types of diet were determined as follow: "A" – (all descriptions very short) – a rare consumption of fried meat and large amounts of raw vegetables, "B" – all medium, and "C" – frequent consumption of fried meat and animal fats and a low (or even lack) raw vegetables.

**Conclusion:** RR is very high for native women at "C" diet (RR = 13.3,  $p < 0.000001$ ) to reference level-diet "A" (RR = 1.0). Most likely significant changes in diet of the immigrant women occurring in the pre- and post-migration periods are cause of the fact that the risk of breast cancer is less marked.

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POSTER

### Evidence-based medicine and the cochrane collaboration: A new approach to medical decision-making in cancer therapy

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**Background:** Evidence-Based Medicine (EBM) is an approach to combine individual clinical expertise with the best external evidence available from clinical research. Key components are systematic reviews involving the systematic collection, synthesis and application of scientific results. The international Cochrane Collaboration (CC) organizes the identification of all potential relevant reports of clinical trials for prepanning, publishing and updating systematic reviews. Actually 14 Cochrane Centers offer logistic and methodical support for 44 review groups who finished 159 systematic reviews in various medical fields up to now. For cancer the Cochrane Cancer Network started to coordinate the work of the review groups. Systematic reviews in Cochrane format are not yet available for the cancer field.

**Objective:** We present and discuss the concept of EBM and the work of the CC with special regards to the structure and activities of the Cochrane Cancer Network.

**Conclusion:** The systematic review process guided by the Cochrane Cancer Network is going to improve the scientific input for guidelines and medical decision-making and will therefore help to improve the quality of cancer therapy.

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POSTER

### Influence of ecologic factors on cancer incidence rates in some regions of Kyrgyzstan

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Located in Central Asia, the Kyrgyz Republic occupies area of nearly 200,000 sq.km, 90% of which are mountains. Kyrgyzstan is regarded as a country with a relatively low cancer incidence rate, which has been declined even more for the last 5 years and in 1996 was 90.7 per 100,000. At the same time, some ecologically unfavorable regions in the republic, where there are radioactive tailings deposits with uranium waste products, present a certain danger for health of people. Studies of the morbidity in these regions have become possible only after the disintegration of the USSR. Between 1995 and 1996 we examined more than 6,000 people in 3 such regions: Meili-Su, Kara-Balta and Kadji-Sai. The analysis of medical survey showed that general and cancer morbidity in all these towns significantly exceeds the average rates for the republic and those for the neighboring regions.

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POSTER

### Cyclic patterns of incidence variations for breast cancer: A hypothesis for heliophysical imprinting

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**Purpose:** The aim was both to confirm cyclicity in breast cancer (BC) rates and present a hypothesis for different risk for BC patients related to solar activity in their year of birth. Cyclicity in breast cancer and other cancers across different countries (Bulgaria, UK, USA) has been revealed [Dimitrov 1995; 1997, unpubl. results]. 'Heliogeophysical imprinting', i.e. later consequences due to influences during early ontogenesis [Kaznacheev e.a. 1985], has also been reported. For instance, most women with early

menarche and benign breast diseases were born about 4 and 8 years after peaks of the solar index Rz, respectively [Ryabykh e.a. 1992].

**Methods:** Crude incidence rates for BC during years 1952–1985 in Bulgaria were considered. Subjects of the case-control study were 10856 females born and diagnosed with BC during years 1897–1972 and 1991–1994, respectively. Time series analysis with filters, descriptive statistics, non-parametric tests, and odds-ratio (OR) with 95% CI were used [Strike 1991; Dimitrov 1993].

**Results:** Cyclicity in BC incidence variations for Bulgaria was confirmed (period  $T = 16 \pm 18$  years,  $P < 0.01$ ). Mean age at diagnosis (MAD) for 3139 patients born in and about the years of solar maxima was about 2 years lower than that for the rest of the BC patients ( $t = 7.21$ ,  $P < 0.001$ ). However, neither MAD ( $P = 0.07$ ) nor risk ( $OR_{\pm}[0.92 \pm 1.36]$ ) was significantly different to that for females with malignant melanoma of the skin (controls). The latter upheld the idea for etiologic associations between these two cancers [Koh e.a. 1987].

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POSTER

### Hemoblastoses in Belarus: 10 years after Chernobyl. Do we have any radiation-dependent increase?

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**Purpose:** Belarus is the country mostly affected by the Chernobyl disaster consequences in terms of the portion of population living in radiation-contaminated territories and of the content of 137 Cs in tissues and 90 Sr in bones of inhabitants and also in terms of the estimated long life bone marrow doses. Therefore, epidemiological studies of post Chernobyl hemoblastoses incidence rate are vitally important and original.

**Methods:** Our team created the National Blood Diseases Register, that includes the data on 10,128 pre-Chernobyl and 12,994 post-Chernobyl cases of haemoblastoses. We fulfilled the register-based study referring to the above periods (1979–1985 vs. 1986–1994).

**Results:** We discovered the statistically significant increase of IR of all the forms of leukemia among adults, but without any correlation between IR and level of radionuclide contamination. There was significant correlation

between IR and level of chemical pollution. Noticeable that in 1993–94 the IR of acute leukemia and CML among the clean-up-workers of the 1986–87 group (the average dose of 5–50 rad), who were evacuated to the most severely chemically contaminated cities, started to increase sufficiently.

**Conclusion:** Taking into account our data, the observed sharp increase of the cancer pathologies in the exposed evacuated persons (especially in the ones, evacuated to the Minsk, the most severely chemically contaminated city), one may treat the small doses of ionizing radiation as accelerators of chemical cancerogenesis.

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POSTER

### Formation of the regional register of hereditary breast cancer

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**Purpose:** The program of forming the regional hereditary and familial breast cancer (BC) register has been fulfilling at the Cancer Research Institute since 1996. The aim is the detection of hereditary forms of BC; long-term follow-up of the relatives from families with BC history; medico-genetic prognostication.

**Methods:** The criteria of selecting families are the following: the presence of two or more BC in combination with cases of ovarian, endometrial and colon cancers in family; early age of cancer appearance; the presence of bilateral lesion. Risk of breast cancer developing is calculated on the base of family-population studies.

**Results:** At present the register includes 75 families. There are more than one third of patients under the age of 40. The women-relatives of patients are recommended the ultra-sound examination under 35 and then the annual mammography. Molecular genetic diagnosis of hereditary BC is planned. For this purpose the formation of DNA bank has been begun. A blood sample is drawn first in families with suspicion to syndrome BC/ovarian cancer.

**Conclusion:** Out of the total number of women under control, there are 45% of daughters and 32% of sisters of BC patients. The psychological and social aspects should be taken into account when settling the prognostic problems of medico-genetic consulting.