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The concept of comprehensive cancer centres of medical universities: A summary of thoughts

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All over the world, Comprehensive Cancer Centres (CCCs) have started to become established ever after the U.S. National Cancer Institute has launched an initiative and formulated quality-oriented and infrastructural prerequisites for institutions to be recognized as such a CCC. Quite simultaneously, a network of CCCs of various characteristics and properties was established within the countries belonging to the European Union. The need for the creation of such CCCs is manifold: it includes the fact that many specialties might be dealing with one singular disease entity, although from different points of view. These disciplines crudely include radiology, pathology plus molecular biology, surgery, medical oncology and radiotherapy. Scientists from each discipline have generated many thousand publications focussing on their medical topic during the recent few years making a general and academically representative command of the entire field incomprehensible to only one medical specialty.

Therefore, the concept of interdisciplinary tumour boards which would discuss each individual patient and the optimal access to diagnosis and treatment of his or her disease. Structurally, tumour boards are based upon the interdisciplinarity of patient treatment, thus creating an important shift in a treatment paradigm by involving an orchestrated attempt of various disciplines into diagnosis and resulting into multidisciplinary treatment. Interdisciplinary tumour boards constitute an attempt to cater all recent advances and scientifically based insights to each individual patient, and are not only able to provide patients with state-of-the-art interdisciplinary care. Moreover and if structured accordingly, many more patients can be recruited into clinical trials which constitute the centerpiece of clinical advances and are a sine qua non for progress. By virtue of the present interdisciplinary expertise, such interdisciplinary tumour boards can also reach out to the medical community by defining standards of care. As a result, this CCC-associated aspect should lead to the definition of not only locally, but also regionally valid treatment guidelines. Thus, it is important for each CCC to seek close cooperation with neighbouring academic institutions resulting in a reciprocal definition of mutually beneficial clinical, academic and scientific exchange. Such neighbouring institu-

tions should include cooperative study groups which have the potential to include many patients into clinical trials within a relatively short time. In the case of the CCC of the Medical University Vienna – General Hospital, such groups include the famous ABCSG and CECOG. Thus, it should be no surprise that the president of ABCSG, Prof. Michael Gnant, holds one of the most important positions within the CCC structure (for further information, please visit www.ccc.ac.at).

CCCs at academic institutions have, however, also other duties defined by academic and university-oriented mission statements which most importantly include academic research on biological processes leading to malignant transformation and spread of tumour cells as well as education of students in the fields of clinical and research-oriented oncology. These duties are complimented by the training of physicians and by furthering continuing medical education.

As laboratory-based research is being conducted within the many disciplines which are also involved in the treatment and/or diagnosis of patients with cancer, a CCC's attempt must be to also coordinate research centering around a series of very circumscribed topics thus uniting the present expertise in order to generate a critical mass leading to the generation of points of scientific gravitation able to acquire funds from governmental as well as non-governmental sources. Within this context, the search for cooperation with scientific institutions outside the boundaries of the CCC has to be sought and implemented. Finally, education in cancer-related topics ranging from our basic understanding of the development of a malignant process to its most sophisticated treatment in the clinic has to be pursued on both the pre- and post-graduate levels.

All of these endeavours need to be complemented by the inclusion of patient advocacy groups, a dialogue with regulatory authorities as well as social workers in order to identify and meet patients' needs.

The CCC at Medical University Vienna – General Hospital now attempts to not only reach these goals but also define the resulting benefits to patients and coworkers alike, to the University and finally to regional and national authorities. Thus, we tend to reach out to the community as such by pursuing our aim to widen the concept of cancer research, diagnosis and treatment.

Conflict of interest

The author declares that there is no conflict of interest.

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