



Prof. Stephen M. Hahn: the important role of radiation oncology in precision oncology

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Editor's note

The 10th Shanghai International Conference on Radiation Oncology (SICRO) was held in Shanghai, from 10th to 11st August 2018, attracting many renowned scholars and specialists from all around the world to share new ideas and experience about the hottest issues in radiation oncology.

During the conference, Prof. Stephen M. Hahn, MD Anderson's Chief Medical Executive, delivered an enlightening speech entitled "*The Role of Radiation Oncology in Precision Oncology*". Seizing this opportunity, the Editorial Office of *Precision Cancer Medicine* had the great honor to invite Prof. Stephen M. Hahn for an interview, sharing with us his opinions about the future and challenge of radiation therapy in precision oncology as well as his special experience in serving MD Anderson (*Figure 1*).

Expert introduction

Professor Stephen M. Hahn (*Figure 1*), MD, FASTRO is the Chief Medical Executive of The University of Texas MD Anderson Cancer Center and a recognized international leader in the field of radiation Oncology and holds the Gilbert H. Fletcher Memorial Distinguished Chair.

In his role as Chief Medical Executive, Dr. Hahn is responsible for day-to-day operations and management of MD Anderson clinical and faculty matters. Dr. Hahn joined MD Anderson as division head and department chair of Radiation Oncology in 2015. He previously served as chair of Radiation Oncology at the University of Pennsylvania's Perelman School of Medicine from 2005 to 2014. He earned his medical degree at Temple University in Philadelphia, completed his internship and residency at the University of California, San Francisco Hospitals and completed a medical oncology fellowship and radiation oncology residency at the National Cancer Institute.

As an active clinician who is board certified in radiation oncology, medical oncology and internal medicine, Dr. Hahn's clinical expertise includes lung cancer and sarcoma



Figure 1 Prof. Stephen M. Hahn.

and his research focuses on the molecular causes of the tumor microenvironment, and the evaluation of proton therapy as a means to improve the efficiency of radiation therapy.

Dr. Hahn is on the board of directors for the American Society for Radiation Oncology, and he serves as a trustee for the American Board of Radiology. In 2013, he was named an American Society for Radiation Oncology Fellow.

Interview (*Figure 2*)

PCM: *Could you please summarize what do you think of the future of radiation oncology in precision oncology, combing the factors of other cancer management (surgery, chemotherapy, immunotherapy...)?*

Prof. Hahn: I think there is an important role for radiation therapy in precision oncology. We have been practicing precision delivery radiation therapy for a number of years.



Figure 2 Prof. Stephen M. Hahn: the important role of radiation oncology in precision oncology (1).

Available online: <http://www.asvide.com/article/view/28466>

But the challenge we face now is how we can incorporate precision therapy with radiation in an era where genomics, transcriptomics and metabolomics are driving cancer decision-making. There is something we can consider. One is, when it is appropriate to combine radiation with targeted agents; when it is immuno-oncology and therapy associated with that in combination with radiation versus immuno-oncology alone. I think there is a great opportunity in both of those settings to improve patient's outcome and finally in treating a patient with oligometastatic disease. I think it is a place where radiation can exert itself in precision oncology.

PCM: *What do you think is the current challenge in radiation oncology?*

Prof. Hahn: Except for its cost, radiation oncology is a highly effective treatment and does provide patients with greater opportunity to be cured and a relatively low toxicity. Hence, we have to do a better job of demonstrating its value and incorporating it with other therapies, particularly with heavy ions, protons and other types of radiation. I am totally convinced that radiation therapy will have an important role to play, particularly as chemotherapy and other target agents get better developed and we just have to do the trials to prove that.

PCM: *Why would you be interested in cancer and radiation oncology from the very first beginning?*

Prof. Hahn: When I first entered medicine, I was a medical oncologist. Then I switched to radiation because it is a field that it can provide great value for patients. Cancer patients

are experiencing hard times and they deserve great care. I want to dedicate myself to radiation oncology because I can acquire the ability to impact cancer patients in a positive way. Radiation is a very effective treatment and we need more platforms to discuss and evaluate it in order to further study in the academic area.

PCM: *Before joining MD Anderson, you served as chair for nine years at the University of Pennsylvania. Could you please tell us what do you think is the most important thing in department management of radiation oncology?*

Prof. Hahn: The priority is to establish a culture of safety where it should predominate everyone's mind so that we provide a safe and effective treatment for patients. Secondly, we have to recruit the absolute best people including faculty members, therapists, dosimetrists, and physicists in management. To get the highest talented people who are determined to offer better treatment for patients in a safe environment is the biggest challenge but also the biggest opportunity for managing a department.

PCM: *We understand you have been appointed as the Deputy President of MD Anderson last year. Could you share with us your specific experience in MD Anderson? Besides, how in your opinion does MD Anderson excel in precision radiation oncology?*

Prof. Hahn: I came to MD Anderson in January of 2015 from the University of Pennsylvania. In my opinion, MD Anderson, as one of the most prestigious institutions with the stated mission of "Making Cancer History," is unmatched in America. So, it was really a dream job for me to lead the division of radiation oncology and serving in this organization just like we are harnessing the great power from our people in the battle of eliminating cancer. In February of 2017, I was honored to be the Deputy President and Chief Operating Officer. We went through some transition of leadership back to that time and we had new president, Dr. Peter WT Pisters, in December of 2017. Recently my title changed to Chief Medical Executive and I am responsible for day-to-day management of the institution, ensuring excellence across all business, clinical and faculty matters. It is been a great pleasure to serve such a wonderful institution and I have learned a lot and hope to do more and better things to cure cancer patients in the future. In terms of precision oncology, I think MD Anderson has been a leader in this field and the radiation

therapy is joining that.

PCM: *We understand you have been productive in the academic arena. This year, together with the Shanghai Fudan University, we have launched a journal named Precision Cancer Medicine with Prof. Xiaomao Guo serving the Editor-in-Chief. What would you expect to see from the journal?*

Prof. Hahn: I would love to see *Precision Cancer Medicine* be a leading journal in precision oncology, attracting articles from all around the world, particularly in precision therapy. How we incorporate with radiation therapy in precision oncology is an exciting new area for all of us and congratulations on starting a new journal.

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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