## RaySearch and ADAC Laboratories Announce Collaboration to Develop Next Generation of Radiation Therapy Planning Software for Cancer Treatment.

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RaySearch Laboratories and ADAC Laboratories (Nasdaq: ADAC) announced today at the annual American Association of Physicists in Medicine meeting, a multi-year exclusive agreement with RaySearch Laboratories AB, based in Stockholm, Sweden, to jointly develop the next generation inverse planning intensity-modulated radiation therapy (IMRT) software that will be integrated with ADAC's Pinnacle3 3D radiation treatment planning system.

The new software will be based on ORBIT (Optimization of Radiation Therapy Beams by Iterative Technique), an advanced software tool developed at the Karolinska Institute in Stockholm that is used to optimize radiation therapy planning for the treatment of cancer.

ORBIT represents a clinical breakthrough in inverse planning IMRT technology because it is capable of handling very complex problems, such as the simultaneous optimization of intensity modulation and radiation beam directions, using both physical and biological treatment objectives. As a result, ORBIT provides physicians the potential to be both more precise and more aggressive than current IMRT treatments. It enables the radiation oncologist to design an optimal treatment plan to achieve complication-free tumor control while accounting for treatment uncertainties due to organ motion, treatment setup errors, and variations in patient sensitivity to radiation therapy.

ORBIT has been under development as a research tool at the Karolinska Institute since 1985 and at RaySearch Laboratories since 2000. In 1997, ADAC became a collaborator with medical physicists from Karolinska on the further development of ORBIT. RaySearch Laboratories continues to have close clinical ties to Karolinska and is now actively commercializing the results of this collaboration.

**David Crussell**, vice president and general manager of ADAC's Radiation Therapy Product business, stated, "Our Pinnacle product has achieved its market-leading position by providing superior software tools that bring advanced techniques into clinical practice. Including ORBIT's biological optimization capability will provide radiation oncology departments with the next generation of advanced inverse IMRT planning on the Pinnacle platform. We are delighted to work with our long-term technology partner, RaySearch, to bring this valuable technology into the market."

**Johan Löf**, director of product development at RaySearch, noted the synergy between ORBIT and ADAC's Pinnacle3 system. "We are excited to work with ADAC to combine into a single, integrated package ORBIT's ability to optimize radiation therapy treatment plans with the clinical accuracy of Pinnacle3's SmartSim CT simulation software and dose calculation algorithms. We believe the combined system will be the most clinically usable and relevant product available for intensity modulation treatment planning."

"ORBIT provides another logical extension to our IMRT treatment planning capabilities," said **Harry Tschopik**, director of global marketing for ADAC's Radiation

Therapy Products group. "ADAC's Pinnacle3 has been the dominant market leader in conformal radiation therapy planning over the last several years. IMRT is an extension of conformal therapy and many of our users perform forward planning IMRT using Pinnacle's current software. The inverse planning IMRT software we are now developing will allow Pinnacle to determine an optimal plan based on user-defined physical objectives. With ORBIT, physicians will finally be able to take into account biological as well as physical factors during plan optimization. We are very excited about the potential of these new tools for improving cancer treatments and the positive impact this will have on our business going forward."

This news release contains forward-looking statements, including statements concerning

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## **About RaySearch Laboratories**

RaySearch Laboratories is a company based in Stockholm, Sweden. RaySearch is committed to delivering innovative methods and software for the improvement of radiation therapy. The company bases its operation on decades of pioneering research in the field of radiation therapy optimization performed at the Karolinska Institute in Stockholm.

## **About ADAC Laboratories**

ADAC Laboratories is the world market-share leader in nuclear medicine and radiation therapy planning systems, and a technology leader providing clinical workflow solutions, management information and knowledge systems to healthcare organizations in North America. ADAC is headquartered in Milpitas, CA, and its HealthCare Information Systems Division is located in Houston, Texas.