**RapidPlan™ Knowledge-Based Planning**

**Brain**


**Head & Neck**


Delaney AR, Dahele M, Tol JP, Kuijper IT, Slotman BJ, Verbakel WFM. *Using a knowledge-based planning solution to select patients for proton therapy*. *Radiother Oncol.* 2017 Aug;124(2):263-270. VU University Medical Center, Amsterdam, The Netherlands


Tol JP, Dahele M, Delaney AR, Slotman BJ, Verbakel WFM. *Can knowledge-based DVH predictions be used for automated, individualized quality assurance of radiotherapy treatment plans?* *Radiother Oncol.* 2015 Nov 19;110(1):234. VU University Medical Center, Amsterdam, The Netherlands


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*This bibliography is a representative selection, but not necessarily exhaustive list, of literature pertaining to Varian’s RapidPlan™ knowledge-based planning (KBP) in particular, with additional general KBP articles foundational to RapidPlan in the General & Foundational section.*
Spine


Thoracic


Delaney AR, Dahele M, Tol JP, Slotman BJ, Verbakel WF. Knowledge-based planning for stereotactic radiotherapy of peripheral early-stage lung cancer. **Acta Oncol.** 2017 Mar;56(3):490-495. VU University Medical Center, Amsterdam, The Netherlands


Breast


Gastrointestinal


Wu H, Jiang F, Yue H, Li S, Zhang Y. A dosimetric evaluation of knowledge-based VMAT planning with simultaneous integrated boosting for rectal cancer patients. **J Appl Clin Med Phys.** 2016 Nov 8;17(6):6410. Peking University Cancer Hospital & Institute, Beijing, China


Genitourinary


Hussein M, South CP, Barry MA, Adams EJ, Jordan TJ, Stewart AJ, Nisbet A. **Clinical validation and benchmarking of knowledge-based IMRT and VMAT treatment planning in pelvic anatomy**, Radiat Oncol. 2016 Sep;120(3):473-479. Royal Surrey County Hospital NHS Foundation Trust, Guildford, United Kingdom


General, Foundational & Mixed Target


Intended Use Summary

Varian Medical Systems’ linear accelerators are intended to provide stereotactic radiosurgery and precision radiotherapy for lesions, tumors, and conditions anywhere in the body where radiation treatment is indicated.

Safety Statement

Radiation treatments may cause side effects that can vary depending on the part of the body being treated. The most frequent ones are typically temporary and may include, but are not limited to, irritation to the respiratory, digestive, urinary or reproductive systems, fatigue, nausea, skin irritation, and hair loss. In some patients, they can be severe. Treatment sessions may vary in complexity and time. Radiation treatment is not appropriate for all cancers.