

Purpose: To assess the current status of in-vivo dosimetry in the Canadian cancer centers.

Methods: A survey on the use of in-vivo dosimetry was performed between July and September 2010. The survey was sent to 39 Canadian cancer centers and it was composed of 16 questions including questions on the use of in-vivo dosimetry as well as demographics of the centers. A total of 34 centers completed the survey. **Results:** The survey showed that the Ontario and Nova Scotia have the largest number staff per clinic (99 and 75, respectively). Alberta and Manitoba have the largest number of medical physicist per clinic (15 and 12, respectively). The majority of the centers (79%) answered that they perform in-vivo dosimetry to some extent. However, none of the centers perform daily or weekly in-vivo dose measurements for individual patients, except for total body irradiation and total skin irradiation treatments. Most of the centers (74%) reported that they use a tolerance level of 5% or higher in their in-vivo dosimetry programs. The majority of the centers (85%) answered that in-vivo dose measurements are performed by the medical physicists other than physics assistants, dosimetrists and therapists. As pointed out by the centers, the major drawbacks and difficulties involved in the use of in-vivo dosimetry included increased treatment and staff time. **Conclusion:** We assessed the current status of in-vivo dosimetry in the Canadian cancer clinics. The results of this survey will serve as a documentation of the current status of the practice of in-vivo dosimetry in Canada. Then, in the future such results will serve as a reference to assess further changes, developments and improvements in the field of in-vivo dosimetry in Canada.