



**Title** Value of Intensity-Modulated Radiation Therapy

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[www.has-sante.fr/portail/display.jsp?id=c\\_490516](http://www.has-sante.fr/portail/display.jsp?id=c_490516)

## Aim

To assess the clinical value of intensity-modulated radiation therapy (IMRT) to advise French National Health Insurance (NHI) on reimbursement.

## Conclusions and results

We selected 20 studies (1406 patients): 1 phase I study, 1 randomized dosimetric study (phase III), 2 nonrandomized controlled studies, 16 case series, and 18 dosimetric studies. They concerned mainly tumors of the head and neck (13 studies, 973 patients), skull base (2 studies, 60 patients), and prostate (3 studies, 315 patients). No cases of grade 3 to 4 xerostomy were found in 6 of the 7 studies reporting complications. There was no difference in efficacy or survival between IMRT and 3D-conformal therapy. The working group proposed further indications not backed up by published evidence.

## Recommendations

HAS advised:

- reimbursement of IMRT for total body irradiation and treatment of the following tumors: head and neck, skull base and vault, spinal cord, and prostate;
- conditional coverage for the following tumors: craniospinal tumors and total medullar irradiation, multiple bone metastases, retroperitoneal tumors, tumors of the limbs and lungs, and pediatric tumors.

## Methods

We reviewed published data on the safety and efficacy of IMRT and its contribution to treatment strategy. The review was discussed by an 11-member multidisciplinary working group before submission to the HAS Committee for Assessment of Medical and Surgical Procedures for their opinion.

## Further research/reviews required

The following are required:

- long-term followup (particularly in pediatrics) because of the potential risk of radio-induced cancer
- confirmation of safety and efficacy in indications with a conditional coverage
- assessment of the impact on quality of life and the public health system (both in terms of health economics and care organization) for all indications.