

## Types of Treatment

- **Brachytherapy (HDR & LDR)** <sup>[1]</sup>  
Brachytherapy is a method of delivering radiation to a tumors by placing radioactive sources either directly into the tumor or very close to it.
- **External Beam Radiation Therapy (EBRT)** <sup>[2]</sup>  
External beam radiation therapy (EBRT) is a type of radiation therapy that directs a beam of radiation from outside the body at cancerous tissues inside the body.
- **Hyperthermia (HT)** <sup>[3]</sup>  
Hyperthermia is a form of therapy that uses heat to enhance effectiveness of radiation and chemotherapy and to destroy tumors.
- **Image Guided Radiation Therapy (IGRT)** <sup>[4]</sup>  
Image guided radiation therapy (IGRT) is a method of radiation therapy that incorporates imaging techniques during each treatment session.
- **Intensity-Modulated Radiation Therapy (IMRT)** <sup>[5]</sup>  
Intensity modulated radiation therapy (IMRT) is a radiation technique that takes advantage of recent advances in imaging and computer technology to provide highly precise radiation dose plans.
- **Intra-Operative Radiation Therapy (IORT)** <sup>[6]</sup>  
Intra-operative radiation therapy (IORT) is the use of radiation therapy during a surgical procedure.
- **Proton Therapy for Ocular Tumors** <sup>[7]</sup>  
UCSF's Ocular Tumor Proton Therapy Program utilizes highly targeted protons to treat melanomas and other tumors that occur in the eye.
- **SDX Breath Monitoring System** <sup>[8]</sup>  
This system reduces the movement of tumors, allowing them to be treated in the most accurate way while patients voluntarily hold their breath.
- **Stereotactic Radiosurgery (SRS)** <sup>[9]</sup>  
The UCSF Radiosurgery program uses Gamma Knife and the most advanced linear accelerator technologies for treatment of various types of benign and malignant brain

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- **Stereotactic Body Radiation Therapy (SBRT)** <sup>[10]</sup>  
SBRT (also known as SABR) uses advanced linear accelerators with specialized imaging technologies, including CyberKnife, TrueBeam, and Versa HD to treat select tumors in a short time
- **Superficial Skin Treatment** <sup>[11]</sup>  
Orthovoltage is a type of radiation therapy that utilizes X-rays which are strong enough to kill cancer cells but do not penetrate more than a few millimeters beyond the surface of the skin.
- **Three Dimensional Conformal Radiation Therapy (3DCRT)** <sup>[12]</sup>  
Three dimensional conformal radiation therapy (3DCRT) is a complex process that begins with the creation of individualized, 3D digital data sets of patient tumors and normal adjacent anatomy.
- **Total Body Irradiation (TBI)** <sup>[13]</sup>  
Total body irradiation (TBI) is a form of radiotherapy used primarily as part of the preparative regimen for haematopoietic stem cell (or bone marrow) transplantation.

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UCSF Main Site

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- [3] <https://radonc.ucsf.edu/hyperthermia>
- [4] <https://radonc.ucsf.edu/image-guided-radiation-therapy-igrt>
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