The mission of ESTRO, a non-profit, scientific organisation, shall be to foster, in all its aspects, radiotherapy (also known as radiation oncology), clinical oncology and related subjects, including physics as applied to radiotherapy, radiation technology and radiobiology.

To fulfil its mission ESTRO will:

- Develop and promote standards of education in radiotherapy and clinical oncology
- Promote standards of practice in radiotherapy, clinical oncology and related subjects
- Stimulate the exchange of scientific knowledge in all related fields
- Strengthen the clinical specialty of radiotherapy and clinical oncology in relation to other specialties and professions involved in cancer management
- Encourage co-operation with international, regional and national societies and bodies representing radiotherapy, clinical oncology and related subjects
- Facilitate research and development in radiotherapy, clinical oncology and related subjects