

Expanding care with low-energy radiation therapy

NON-MELANOMA SKIN CANCER
BENIGN CONDITIONS
PALLIATIVE CARE

Serving thousands of patients
worldwide through cancer care
clinics, dermatology practices
and veterinary oncology



Advancing Radiation Therapy for Non-Melanoma Skin Cancer, Benign Conditions, and Palliative Care

Rapidly evolving therapies and new indications for treatment are all driving demand for new cost effective radiation therapy treatment options to meet diverse patient needs. Xstrahl's superficial and orthovoltage radiation therapy systems can help improve the level of patient care, treatment capacity, and the range of treatment options for your patients quickly, simply, and affordably.

Specialized clinical solutions for radiation oncology, dermatology and veterinary medicine

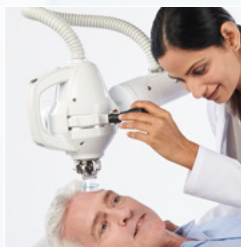
Xstrahl offers a full range of low-energy radiation therapy delivery systems that enable clinical teams to deliver highly patient-centric care, more efficiently and effectively. Cancer care providers can easily release hours of time on linear accelerators to serve patients with more complex clinical needs. A wide range of clinical conditions can be treated with Xstrahl radiation therapy systems.

Chosen by leading clinicians and specialists around the world, Xstrahl radiotherapy systems are designed for the treatment of non-melanoma skin cancer, dermatological disorders, certain types of benign disease and some palliative care, giving you:

- **VERSATILITY** – customized energy selection to suit your clinical requirements
- **PERFORMANCE** – accuracy and flexibility with multiple treatment field sizes and easier workflow
- **VALUE & EFFICIENCY** – cost effective route to increasing radiotherapy capacity

XSTRAHL RADIATION THERAPY PORTFOLIO

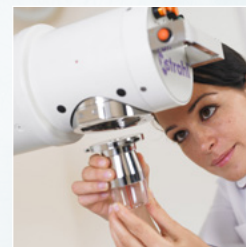
Improve patient care, treatment capacity, and the range of treatment options quickly, simply, and affordably



Radiant™ Aura



Xstrahl 100



Xstrahl 150



Xstrahl 200



Xstrahl 300



CLINICAL
INDICATIONS

The value of radiotherapy



Rising cancer incidence is driving an increased demand for radiotherapy.¹



Radiotherapy is a **highly cost effective** and clinically effective treatment.^{1,2}



Worldwide **access to radiotherapy is low**² and disparities in access could be improved by **increased capacity** and better management of services.³



Radiotherapy accounts for a small percentage of national spend on cancer treatment in many countries, yet is the second most effective treatment for cancer, next to surgery.^{1,4}



Studies have shown that investment in radiotherapy is critical and not only enables treatment of large numbers of cancer cases, but also brings **positive economic benefits**.^{5,2}



Additional capacity is required to meet radiotherapy demand⁶ and **relieve pressure on linear accelerators**.



“The incidence of both non-melanoma and melanoma skin cancers has been increasing over the past decades. One in every three cancers diagnosed is a skin cancer.”

— World Health Organization, 2017



Why invest in Xstrahl?

Xstrahl offers a range of solutions that fit with your needs and those of your patients. Xstrahl radiation therapy systems are available across a spectrum of energy options to suit different clinical needs. Radiant™ Aura, Xstrahl 100 and Xstrahl 150 low energy options are ideal for treating superficial skin cancers and keloid scars.

Xstrahl 200 and Xstrahl 300 enable deeper skin lesions to be treated and the additional orthovoltage capability makes them ideal to provide palliative care.

Leading patient-centered therapy

Patient experience, precision and safety are at the forefront of the Xstrahl system design. Smooth adjustment for patient set up is integral to the entire design process, with maximum maneuverability to ensure patients can be treated in the safest and most comfortable position possible.

“The problem with using a linear accelerator for skin cancer is that it’s hard to know exactly what is going on. Superficial systems offer a practical and straightforward way of providing a fixed dose depth and a very sharp penumbra, meaning they are ideal for treating skin conditions precisely and with high degrees of patient comfort.”

— Dr. David Eaton, Head of Radiotherapy Physics, Guy’s & St. Thomas NHS Foundation Trust, United Kingdom



**VERSATILE
WORKFLOW**



**COST
EFFECTIVE**



**EASY
TREATMENTS**

Clinical Indications

Basal cell carcinoma

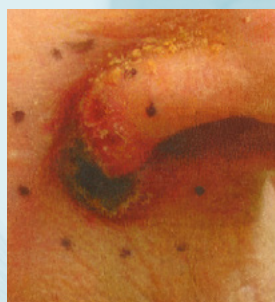
Squamous cell carcinoma

Pre-invasive NMSC lesions

CTCL/ Mycosis fungoides

Benign Hyperproliferative Diseases

- Dupuytren’s
- Ledderhose disease
- Keloid scars



“Orthovoltage treatment may be easier to use for small tumours and for frail patients. It is therefore important that radiotherapy departments continue to provide access to such machines.”⁷

25+

Decades of experience shaping superficial and orthovoltage radiation therapy and advancing preclinical radiation research

Xstrahl delivers clinical advantages

Superficial radiotherapy is particularly useful for treating some types of skin cancer including basal cell carcinoma and squamous cell carcinoma. Radiotherapy is often preferable to surgery for cosmetic or functional purposes and can deliver excellent outcomes, including pain management for numerous conditions.^{8,9,10,11,12}

Ultimate control and usability

The set up and day-to-day use of Xstrahl radiotherapy equipment has a number of advantages:

- Real-time monitoring of the prescribed treatment dose
- Customized energy selection to suit clinical requirements for percentage depth dose
- Multiple treatment fields delivered sequentially without delays between exposures
- Connectivity to patient management systems
- Integration with third-party clinical information systems
- Meets safety requirements with fully encoded filters and treatment applicators
- Low energy radiation delivery so less construction and room shielding is required
- Ergonomic control and space savings designs to minimize footprint
- Simple and intuitive clinical interface for ease of operation

Manage your workflow more efficiently

The quality of radiotherapy services and treatment capacity are increasingly in focus. Adding an Xstrahl X-ray solution to your clinic is a cost effective way of increasing radiation treatment capability benefiting patients enormously.

- Relieve pressure on linear accelerators
- Save valuable hospital space and easily move units to allow the treatment room to be deployed for other purposes
- Improve patient experience, comfort, and satisfaction



EXPERTS IN RADIATION DELIVERY

700+

In operation at more than 700 treatment and research facilities worldwide.

XSTRAHL SOLUTIONS MAKE BUSINESS SENSE

Xstrahl radiotherapy systems are a cost effective way of increasing radiotherapy capacity and enhancing your service offering. Choosing to invest in low-energy radiation therapy systems makes long-term clinical and economic sense. Xstrahl also provides an unsurpassed level of service from initial specification and suite design through to installation and ongoing training, education, and maintenance. The Xstrahl team's unique in-depth understanding of the clinical environment and radiation therapy techniques ensures an unrivalled level of clinical training for anyone who uses an Xstrahl system.

Whatever the facility, from the initial planning phase, Xstrahl's expert engineers will be able to assess and advise on all aspects of the room preparation including access routes and logistical advice. Efficient and complete installation is ensured by all of the Xstrahl engineers as they undertake regular manufacturing and systems training to maximize familiarity of every product right down to the individual components.

Xstrahl applications specialists provide tailored training to enhance professional development and support treatment excellence and patient care. Xstrahl is also committed to maximizing system uptime in busy oncology and dermatology clinics. Xstrahl offers online service engineer support and regular training courses for customers' on-site engineers. Xstrahl operates comprehensive customer support through its international network.

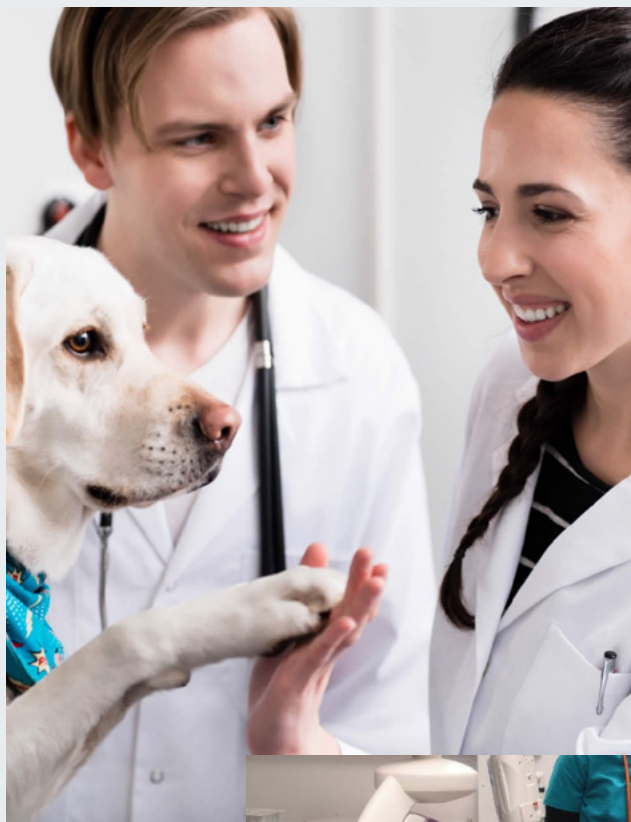
"We treat all types of non-melanoma skin cancer. We can also treat keloid scars and other non-malignant skin problems. We can get multiple skin cancers in one field... we have had some really impressive results to date. We've had patients who have avoided large grafts and surgeries."

— **Martin Noller, Radiation Therapist & Owner,
Just Skin, Australia**



"Our Dermatology center relies on Xstrahl 100 and 150 systems to treat skin malignant neoplasms. We are seeing an increasing number of patients with basal cell and squamous cell carcinomas due to aging of the general population. The Xstrahl radiotherapy systems help us to respond to this growing treatment demand and we treat these patients on an outpatient basis, helping us to reduce surgical and hospitalization costs. The team find the Xstrahl technology easy to use and helps them to deliver safe and effective radiotherapy to our patients."

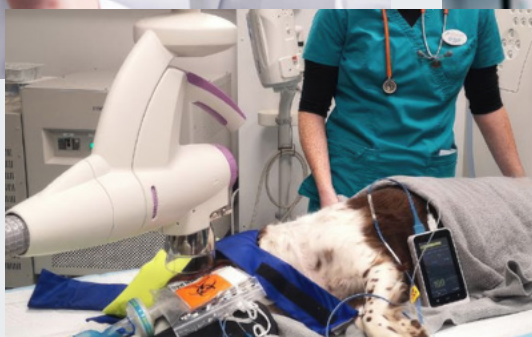
— **Roberta Piccinno, MD, Photoradiotherapy Department, Dermatology Unit,
Fondazione IRCCS Ca'Granda Ospedale Maggiore Policlinico, Milan, Italy**



Expanding Veterinary Practices with Radiation Therapy

For nearly 30 years, veterinary practices have been using radiation as an important modality to treat cancer for both curative and palliative purposes and to treat other conditions like arthritis and joint pain in companion animals. Although the standard of care is intensity-modulated radiation therapy delivered with a linear accelerator, these treatments are very expensive, and low-energy orthovoltage treatments offer similar outcomes at a fraction of the cost. Compact and ergonomic systems also simplify treatment workflow.

Discover how to deliver effective radiation therapy for the animals in your practice with value and ease



**READ MORE
AND SEE CASES**

"Here at Valley View, we have been using the Xstrahl 150 model to treat a high proportion of our patients with skin cancers and keloids. When we were deciding which superficial radiotherapy unit to purchase, we were attracted to the Xstrahl models because they offered higher energies compared to competitor units. We also liked detailed features of the machine such as the water cooling system and the interlock option on the filter selection.

We love using the Xstrahl radiotherapy system to treat our patients because of its user-friendly technology and the variety of energy levels available. The system is very reliable and we have had 100% uptime."

— John Sweet, Medical Physicist, Valley View Hospital, Glenwood Springs, USA



ONGOING SUPPORT

Xstrahl prides itself on providing best-in-class customer service with every system. We are proud to provide an unsurpassed level of service, from initial planning through to after sales maintenance and both technical and applications support. Xstrahl works with you to ensure your system operates effectively and efficiently, minimizing downtime and maximizing performance.

From user training to our extensive range of ongoing maintenance and service contracts, the Xstrahl team's comprehensive in-depth knowledge ensures an unrivaled level of technical support is provided to all users. Our international network of factory trained and clinically experienced engineering teams support hundreds of clinical radiotherapy and research systems worldwide.

References

1. Radiotherapy Services in England 2012 Report. National Radiotherapy Implementation Group (NRIG). 6 November 2016. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213151/Radiotherapy-Services-in-England-2012.pdf.
2. Atun R et al. Expanding global access to radiotherapy. *Lancet Oncology*, Volume 16, No. 10, p1153–1186, September 2015. Available at: [http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(15\)00222-3/fulltext](http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(15)00222-3/fulltext).
3. Rosenblatt E et al. Radiotherapy capacity in European countries: an analysis of the Directory of Radiotherapy Centres (DIRAC) database. *Lancet Oncology*, Volume 14, No. 2, e79–e86, February 2013. Available at: [http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(12\)70556-9/abstract](http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(12)70556-9/abstract)
4. Wagstaff A. Radiotherapy report sets new targets for Europe. *Cancerworld.org*. Available at: http://www.cancerworld.org/pdf/6424_32_36_cw9_Spotlighton.pdf
5. Union for International Cancer Control. Global Task Force on Radiotherapy for Cancer Control. April 2014. Available at: <http://www.uicc.org/sites/main/files/private/GTFRCC%20Introduction.pdf>.
6. National Radiotherapy Advisory Group Report. Radiotherapy: developing a world class service for England. 26 February 2007. Available at: http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@_dh/_@en/documents/digitalasset/dh_074576.pdf.
7. National Institute for Health and Clinical Excellence. Guidance on Cancer Services – Improving Outcomes for People with Skin Tumours including Melanoma. February 2006. Available at: <http://www.nice.org.uk/guidance/csg8/evidence/full-guideline-2006-2191950685>
8. Veness MJ. The important role of radiotherapy in patients with non-melanoma skin cancer and other cutaneous entities. *Journal of Medical Imaging and Radiation Oncology* (2008) 52, 278–286
9. Zagrodnik B et al. Superficial radiotherapy for patients with basal cell carcinoma: recurrence rates, histologic subtypes, and expression of p53 and Bcl-2. *Cancer*. 2003 Dec 15;98(12):2708–14.
10. Tward JD, Anker CJ, Gaffney DK and Bowen GM (2012). Radiation Therapy and Skin Cancer, *Modern Practices in Radiation Therapy*, Dr. Gopishankar Natanasabapathi (Ed.), ISBN: 978- 953-51-0427-8, InTech, Available from: <http://www.intechopen.com/books/modern-practices-in-radiation-therapy/radiation-therapeutic-options-for-skin-cancer>.
11. Ott OJ, Jermias C et al. Radiotherapy for Calcaneodynia Results of a single center prospective randomized dose optimization trial. *Strahlentherapie und Onkologie* (2013) 189: 329–334.
12. Ott OJ, Jermias C et al. Benign painful shoulder syndrome Initial results of a single- center prospective randomized radiotherapy dose-optimization trial. *Strahlentherapie und Onkologie* (2012) 188:1108–1113

About Xstrahl

Xstrahl is a medical technology company that designs clinical and research systems to help eradicate cancer. For more than 25 years, Xstrahl has been shaping the development of superficial and orthovoltage therapies for cancer treatment and advancing pre-clinical research. Xstrahl systems are in operation at more than 700 treatment and research facilities worldwide.

Xstrahl.com

