Create treatment plans with precision
With sophisticated automation and a flexible client-server architecture, XiO empowers clinicians to develop precise treatment plans in an efficient clinical environment. XiO delivers rapid and reliable registration of multiple data sets with automated image fusion. Automated contouring tools, including patented autosegmentation functionality and powerful drawing and editing features, allow quick and easy identification and delineation of target volumes and critical structures. Flexible plan review functions feature powerful dose visualization and analysis tools in a customizable user layout.

A client-server architecture is specifically designed for multi-workstation/multi-site configurations to support the most demanding clinical environments. The Linux operating system's built-in multitasking capabilities and multiple Intel processors deliver superior 3D rendering, real-time image manipulation and fast calculation times.
Enhance Planning Performance
Choose from a broad suite of planning tools and range of robust dose calculation algorithms to optimize radiation therapy delivery for each patient. And generate highly accurate plans more quickly and easily with an intuitive, user-friendly interface.

Select Among Expanded Planning Capabilities
With support for a range of modalities and techniques, clinicians can expand their treatment planning capabilities. The XiO integrated external beam features support for 2D, 3D conformal, IMRT with MLC and solid compensator delivery. The platform also supports a broad range of beam modifiers for all delivery systems and diverse techniques, including dynamic conformal arc therapy, stereotactic delivery, brachytherapy and proton planning.

State-of-the-Art Dose Accuracy
Increase planning accuracy and precision with a choice of robust dose calculation algorithms. With Clarkson, FFT Convolution, MultiGrid Convolution, Fast Superposition and Electron Monte Carlo* models available, clinicians can choose the algorithm that is most appropriate for each plan. Elekta’s commitment to calculation reliability and accuracy is reflected in its MultiGrid Superposition algorithm, which represents state-of-the-art for 3D planning.

DICOM RT Connectivity
Support for the DICOM RT standard provides timely and efficient access to image sets and patient data, as well as easy treatment plan export to all major delivery devices. The Elekta IQ Server patient database of the MOSAIQ* oncology information system offers an option for centralized long term patient data storage for DICOM RT and non-DICOM data.
Workflow

XiO provides the efficiency you require to achieve exceptional performance at every phase of treatment—from imaging through delivery.

Patient Contouring
Fast, accurate contouring is essential to planning efficiency and productivity. Elekta offers an integrated suite of automated, easy-to-use contouring tools and enhanced visualization capabilities for rapid delineation and modification of critical planning structures.

Plan Review
The XiO multi-vendor plan review capability offers a flexible layout environment, rich graphical displays and powerful analytical tools to help clinicians compare multiple candidate plans, quantify and evaluate dose coverage trade-offs and ensure the best course of treatment for each patient.
**Image Fusion**  
Advanced image registration and fusion tools enable effective utilization of all available diagnostic imaging modalities. Rapid and reliable automated fusion helps ensure that planning structures have the best possible delineation options.

**Virtual Simulation**  
Advanced visualization tools and fully integrated CT simulation increase staff efficiency, planning accuracy and patient convenience.
**IMRT Planning**
An intuitive prescription-based inverse planning solution accelerates DVH prescription modification, optimization and dose calculation for dynamic and segmental (step-and-shoot) IMRT delivery.

**Conformal Planning**
2D and 3D conformal treatment planning capabilities include customizable templates that support efficient plan generation.
XiO integrated planning capabilities support the range of particle treatment modalities, including:

- Broad Beam, supporting Scattered or Wobbled beams
- Spread-out Bragg peak (SOBP), using rotating wheels or ripple filters, apertures, MLC and compensation filters
- Spot Scanning with intensity modulated proton therapy (IMPT), including MU calculations, nuclear interactions, lateral inhomogeneities and substops
A human care company, Elekta pioneers significant innovations and clinical solutions for treating cancer and brain disorders. Elekta provides intelligent and resource-efficient technologies that improve, prolong and save patient lives. We go beyond collaboration seeking long-term relationships built on trust with a shared vision, offering confidence to healthcare providers and their patients.

Personalized Services
Beyond Standard Support

XiO Helps Clinics Maximize Performance
Elekta’s treatment planning software enables the practice of evidence-based medicine.

- Automated planning tools
- Dose accuracy and flexibility
- Intuitive IMRT planning
- Comprehensive planning capabilities

Excellence in Customer Satisfaction
Elekta Software employs the largest full-time staff of dedicated radiation treatment planning professionals in the industry. When clinics select Elekta solutions, they gain access to the company’s entire customer support and research and development team:

- PhD and MS physicists
- PhD mathematicians
- CMDs and RTTs
- Professional software and hardware engineers

For more information, contact your local Elekta representative.