TomoDirect™ is a non-rotational treatment option for the TomoTherapy® platform. It was developed as a clinical complement to the TomoHelical™ delivery mode, and allows users to plan and treat routine cases with greater efficiency, while maintaining the quality of TomoTherapy’s unique beamlet-based delivery.

Applying platform power for patient throughput
With the TomoDirect mode, the user can simply:
- apply up to 12 discrete angles to single or multiple targets for optimal coverage;
- define a modulation level, or opt for tissue-compensated 3D conformal delivery;
- complete treatment planning quickly with all the power of the TomoTherapy computing platform applied to a small number of beams; and
- deliver all beams for each target, sequentially, with a single turn of the operator console key.

As with the TomoHelical mode, the treatment couch passes through the bore of the system during a TomoDirect delivery. This makes it possible for users to treat target volumes up to 135 cm in length for typical patient set-up, with no need to reposition the patient and no field junctioning required.
A direct response to customer requests

TomoTherapy is focused on helping cancer centers deliver the highest-quality radiation therapy to every patient who walks through the door. To fulfill this mission, we continually seek the input of existing and prospective customers to tell us what they need most from our advanced radiation therapy platform. The TomoDirect delivery mode addresses a number of these critical needs.

TomoDirect technology facilitates breast treatments with a familiar “tangent-like” dose distribution that can be quickly planned and delivered.

Right breast tangential delivery
- Two tangential beams
- Planning time: ~ 10 minutes
- Treatment delivery time: ~ 2.5 minutes

Whole brain treatment delivery
- Right and left lateral beams
- Planning time: ~ 10 minutes
- Treatment delivery time: ~ 2.2 minutes

Three metastatic sites
- 11 treatment beams
- Planning time: ~ 10 minutes
- Treatment delivery time: ~ 10 minutes
- Automated delivery
- No shifting of the patient between sites
- No field junctioning

The TomoDirect delivery mode is included as standard on the TomoHD™ treatment system, and is available as an option on the Hi·Art® treatment system.