

# Parallels and Intersections in Thoracic Proton Therapy

	<u>JHU</u>	<u>UMCG</u>
<u>Patient selection</u>	<ul style="list-style-type: none"><li>• <math>\delta</math>NTCP criteria</li></ul>	<ul style="list-style-type: none"><li>• <math>\delta</math>NTCP criteria</li></ul>
<u>Target</u>	<ul style="list-style-type: none"><li>• iGTV / ITV</li></ul>	<ul style="list-style-type: none"><li>• ITV</li></ul>
<u>Motion assessment</u>	<ul style="list-style-type: none"><li>• <math>\parallel</math> WET, <math>\perp</math> DIR</li></ul>	<ul style="list-style-type: none"><li>• DIR</li></ul>
<u>Optimization</u>	<ul style="list-style-type: none"><li>• 4D RO</li></ul>	<ul style="list-style-type: none"><li>• 3D RO + overrides</li></ul>
<u>Interplay mitigations</u>	<ul style="list-style-type: none"><li>• Rescanning</li><li>• Delivery sequence opt</li></ul>	<ul style="list-style-type: none"><li>• Rescanning</li><li>• Spot degradation</li></ul>
<u>Dose evaluation</u>	<ul style="list-style-type: none"><li>• Error scenarios (pre-tx)</li><li>• T0/T50 (pre-tx)</li></ul>	<ul style="list-style-type: none"><li>• Error scenarios (pre-tx)</li><li>• Daily 4D dose</li></ul>
<u>Anatomical changes</u>	<ul style="list-style-type: none"><li>• Repeat imaging</li><li>• Multi-CT optimization</li></ul>	<ul style="list-style-type: none"><li>• Repeat imaging</li><li>• Re-planning</li></ul>

