# Gated Thoracic Aorta Fast 64 Siemens

**Used when HR above 100**

## Indications
- Trauma, acute aortic syndrome, suspected aneurysm/dissection

## Diagnostic Task
- Detect aneurysms, aortic dissections and

## Scan mode
- Prospective 300s

## Position/Landmark
- First-Supine-inspiration

## Topogram
- AP 120kV 35mA Lat 120kV 35mA

## kVp/Reference mass
- WO contrast scan 100kV, 200mA/gated 120kV 400mA

## Rotation time/pitch
- WO contrast 0.5/0.8//gated 0.33s/0.3 pitch

## Detector Configuration
- 24x1.2

## Dose reduction
- Without-care dose on//gated off

## Allowed CTDI ranges*
- 7mGy-50mGy

## XR29 Dose Notification value
- 50mGy

## NC scan
- 1.5mm x 1.5mm, B20f, Mediastinum

## Helical Set

<table>
<thead>
<tr>
<th>Helical Set</th>
<th>body</th>
<th>thickness</th>
<th>recon part</th>
<th>spacing</th>
<th>algorithm</th>
<th>destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gated Aorta 300ms</td>
<td>1.5mm x 1.5mm</td>
<td>b20f/mediastinum</td>
<td>pacs/TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Gated Aorta 300ms</td>
<td>2mm x 2mm</td>
<td>b20f/mediastinum</td>
<td>pacs/TR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 coronal chest</td>
<td>2mm x 2mm</td>
<td>b20f/mediastinum</td>
<td>pacs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 sagittal chest</td>
<td>2mm x 2mm</td>
<td>b20f/mediastinum</td>
<td>pacs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 lung</td>
<td>1.5mm x 1.5mm</td>
<td>b60f/lung</td>
<td>pacs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 axial mip lung</td>
<td>10mm x 2mm</td>
<td>lung</td>
<td>pacs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Cor MIP Aorta</td>
<td>5mm x 2mm</td>
<td>b20f/mediastinum</td>
<td>pacs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Sag MIP Aorta</td>
<td>5mm x 2mm</td>
<td>b20f/mediastinum</td>
<td>pacs</td>
<td></td>
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</tr>
</tbody>
</table>

## Scan Start/end location
- Scan caudocranial from liver dome
- to thoracic inlet (top of lung)

## DFOV recon 1 thins
- 275mm-aorta and heart

## IV contrast volume/type
- 100ml Isovue 370 at 4cc/sec

## Scan delay
- Bolus Tracking at descending aorta (level just inferior to carina)
  - Trigger is +50HU

## Approximate Values for CTDIvol

<table>
<thead>
<tr>
<th>Patient size</th>
<th>weight(kg)</th>
<th>weight(lbs)</th>
<th>CTDIvol(mGy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALL</td>
<td>50-70</td>
<td>110-155</td>
<td>4-10</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>70-90</td>
<td>155-200</td>
<td>6-10</td>
</tr>
<tr>
<td>LARGE</td>
<td>90-120</td>
<td>200-265</td>
<td>14-22</td>
</tr>
</tbody>
</table>

**NOTE**
- *The AAPM recommended NEMA XR29 Dose Notification Value for an adult torso is 50mGy. Dose Notification levels less than the AAPM recommended can be set. The maximum CTDI vol should match the dose notification value. Exams with CTDI vol values less than the minimum allowed range should not be performed unless approved by a radiologist.*