

# CT Colonography 16 GE

|                              |  |                 |                   |              |                   |
|------------------------------|--|-----------------|-------------------|--------------|-------------------|
| Indications                  | Screening  |                 |                   |              |                   |
| Diagnostic Task              | Detect polyps and colon cancer   |                 |                   |              |                   |
| Scan mode                    | Helical  |                 |                   |              |                   |
| Position/Landmark            | Head first-Supine S25-I500   |                 |                   |              |                   |
| Topogram                     | AP 120kV 10mA Lat 120kV 20mA   |                 |                   |              |                   |
| kVp/Reference mass           | 120kv Smart mA (100-440)   |                 |                   |              |                   |
| Rotation time/pitch          | 0.5/1.375:1  |                 |                   |              |                   |
| Detector Configuration       | 16x1.25  |                 |                   |              |                   |
| Table Speed/Increment        | 13.75  |                 |                   |              |                   |
| Dose reduction               | Noise Index 24.68  |                 |                   |              |                   |
| Allowed CTDI ranges*         | 7mGy-50mGy   |                 |                   |              |                   |
| XR29 Dose Notification value | 50mGy  |                 |                   |              |                   |
| Helical Set #1<br>supine     | recon  | body part       | thickness spacing | algorithm    | recon destination |
|                              | 1  | abdomen/pelvis  | 2.5mmx 2.5mm      | standard     | pac               |
|                              | 2  | abdomen/pelvis  | 1.25mmx0.625mm    | standard     | pac/TR            |
|                              | 3  | sag abdomen     | 2mmx2mm           | standard     | pac               |
|                              | 4  | coronal abdomen | 2mmx2mm           | standard     | pac               |
| Helical Set #2<br>prone      | recon  | body part       | thickness spacing | algorithm    | recon destination |
|                              | 1  | abdomen/pelvis  | 2.5mmx 2.5mm      | standard     | pac               |
|                              | 2  | abdomen/pelvis  | 1.25mmx0.625mm    | standard     | pac/TR            |
|                              | 3  | sag abdomen     | 2mmx2mm           | standard     | pac               |
|                              | 4  | coronal abdomen | 2mmx2mm           | standard     | pac               |
| Scan Start/end location      | 1cm superior to diaphragm(include all air)<br>lesser trochanters   |                 |                   |              |                   |
| DFOV                         | 40cm<br>decrease appropriately   |                 |                   |              |                   |
| IV contrast volume/type      | none   |                 |                   |              |                   |
| Scan delay                   | none   |                 |                   |              |                   |
| Prep                         | see prep worksheet   |                 |                   |              |                   |
|                              | see procedure worksheet for CO2 insufflation   |                 |                   |              |                   |
|                              | Approximate Values for CTDIvol   |                 |                   |              |                   |
|                              | Patient size   | weight(kg)      | weight(lbs)       | CTDIvol(mGy) |                   |
|                              | SMALL  | 50-70           | 110-155           | 10-17        |                   |
|                              | AVERAGE  | 70-90           | 155-200           | 15-25        |                   |
|                              | LARGE  | 90-120          | 200-265           | 22-35        |                   |
| 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. |                 |                   |              |                   |

