

## Dobutamine stress function (45 minutes)

|    | Item  | Sequence  | Orientation                                     | Remarks  |
|----|---|---|---|--|
| 1  | Localizer   | Localizer   | orthogonal,<br>anatomical axes                  |  |
| 2  | Planning of LV fct.                               | cine SSFP   | multiple axes                                   | Realtime   |
| 3  | LV function at rest                               | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | slice thickness 8-10 mm<br>bh 15 - 26 sec<br>> 20 phases<br>Tpat ≤ 4   |
| 4  | LV function @ 10 µg/kg                            | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | dto.   |
| 5  | LV function @ 20 µg/kg                            | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | dto.   |
| 7  | LV function @ 30 µg/kg                            | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | dto.   |
| 8  | LV function @ 40 µg/kg                            | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | dto.   |
| 9  | LV function @ 40 µg/kg<br>plus Atropin 3 x 0.5 mg | cine SSFP   | 6 long axes in one bh<br>3 short axes in one bh | dto.   |
| 10 | Irreversible injury<br>Fibrosis                   | Inversion-<br>Recovery<br>Gradient Echo<br>("Late Gd<br>enhancement") | short axis stack<br>3 long axes                 | 5 to 30 minutes after Gd-DTPA<br>(0.15mmol/kg) or equivalent:<br>Breath-held 2D or 3D<br>individually optimized TI<br>optional: single slice, added short TI<br>(fibrosis appears with low signal) |

Target heart rate:  $(220 - \text{age}) \times 0.85$