## Supplementary Table 3. Breast MRI Recommended Protocol Summary

<table>
<thead>
<tr>
<th>Indication</th>
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<tbody>
<tr>
<td>Breast cancer staging before treatment planning</td>
<td>Evaluation of response to neoadjuvant chemotherapy</td>
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<tr>
<td>Screening test of high-risk group including BRCA mutation carrier</td>
<td>Patients with breast augmentation or reconstruction</td>
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<td>If foreign substances injected into the parenchyma are not available for</td>
<td>Occult primary breast cancer</td>
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<tr>
<td>examination other than MRI.</td>
<td>Other follow-up of lesions found in breast MRI</td>
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</table>

### Machine and patient’s position

Obtain images of both breasts while patient is in a prone position using a breast dedicated coil in devices with more than 1.5 T.

### Imaging plane

The image plane can be obtained by a radiologist, who is comfortable with reading, but both breasts should be included, and the scan range must have no missing areas.

### Pulse sequence (must include at least 4 of the following pulse sequences)

- T2-weighted images
- Three or more T1-weighted images (pre-enhancement, early-enhancement, and second-enhancement)

### Considerations when evaluating imaging quality

- Water content should be well separated in T2-weighted images.
- Contrast enhanced T1-weighted images should be taken by fat suppression technique or should include subtraction images.
- Contrast-enhanced T1-weighted images should include images taken between 60 and 120 seconds after contrast injection and images taken after 4 minutes.
- The slice thickness of contrast enhanced T1-weighted images should be less than 3 mm and should not have gaps.
- The spatial in-plane resolution of contrast enhanced T1-weighted images should be less than 1 mm², should be less than 1.5 mm².
- Temporal resolution of contrast enhanced T1-weighted images should be less than 120 seconds.