Aims
The purpose of our study was to evaluate the diagnostic performance of breast magnetic resonance imaging (MRI) in the evaluation of contralateral breast in patients with diagnosed breast cancer. A secondary objective was to determine accuracy of breast MRI in diagnosing multi-focal and multicentric lesions in the ipsilateral breast.

Materials and Methods
Using a non-probability convenience sampling technique, patients with histopathologically diagnosed breast cancer with MRI of breast performed to exclude additional lesions were included. MRI findings were correlated with histopathology. In addition, follow-up imaging with mammography and ultrasound was also assessed for establishing stability of negative findings and for the detected benign lesions.

Table 1.
Diagnostic Performance of MRI Breast for Evaluation of Multifocal/Multicentric & Contralateral Lesions.

<table>
<thead>
<tr>
<th>Type of Lesion</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>PPV</th>
<th>NPV</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multifocal/Multicentric</td>
<td>85.71% (95% CI: 83.41-87.91)</td>
<td>88.89% (95% CI: 86.53-91.25)</td>
<td>90% (95% CI: 86.45-93.59)</td>
<td>96.96% (95% CI: 93.18-99.74)</td>
<td>88.37%</td>
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<tr>
<td>Contralateral Breast</td>
<td>100% (95% CI: 97.73-100)</td>
<td>97.73% (95% CI: 94.61-100)</td>
<td>97.33% (95% CI: 94.43-100)</td>
<td>100% (95% CI: 97.05-100)</td>
<td>97.90%</td>
</tr>
</tbody>
</table>

* 95% CI: 95% confidence interval; PPV: Positive Predictive Value; NPV: Negative Predictive Value; CI: Confidence interval

Result
Out of 157 MRI breast conducted during the period of 2008 to 2013, 49 were performed for patients with diagnosed breast cancer. The sample comprised of all females with mean age 50.7±11.0 years. The patient follow-up imaging was available for a period of 2-5 years. The sensitivity, specificity, positive and negative predictive values of MRI in the detection of multifocal/multicentric lesions was 85.7%, 88.8%, 60% and 96.6% respectively and for the detection of lesions in the contralateral breast were 100%, 97%, 83.3% and 100% respectively.

CONCLUSIONS
Our study highlights the diagnostic performance and the added value of MRI in the detection of multifocal/multicentric and contralateral malignant lesions. In patients with diagnosed breast cancer having dense breast parenchyma and with infiltrating lobular carcinoma as the index lesion MRI is particularly useful with excellent negative predictive value in the exclusion of additional malignant foci in the ipsilateral and contralateral breasts.