Several different techniques are currently used for lung blocking in breast conservative treatment. An evaluation of two of these techniques was conducted using the Pinnacle<sup>3</sup> three-dimensional treatment planing system. Two techniques were investigated: a SSD setup that uses custom cerrobend blocking which follows the lung contour, and an isocentric setup with the collimators rotated to follow the contour of the lung. The isodose distributions in the transverse central axis plane for both the isocentric and SSD lung contoured techniques are very similar for all breast sizes, but in the central sagittal plane there is a considerable difference in the superior medial aspect of the treatment field. In the SSD lung contoured technique, the field continues to follow the shape of the lung posteriorly, while in the isocentric technique this area is not treated. This allows the dose to the breast to remain approximately the same, while the dose to the lung is decreased. On average, in the custom block technique, 20 percent of the ipsilateral lung volume is included in the treatment field, as opposed to 12 percent in the isocentric technique. Dose to the contralateral breast is also significantly reduced by using the isocentric technique. The custom blocks used in the SSD lung contoured method generally transmit 3 to 5 percent of the primary beam, while the primary collimator jaws typically transmit less than 0.5 percent. Therefore, the isocentric technique can result in a reduction of contralateral breast dose by as much as a factor of 10.