

Data Supplement: Sensitivity analyses

1) One-way sensitivity analysis on the unit cost of MRI

In the French payment scheme, the reimbursement tariff of MRI consists of 3 different components: professional fees (€69), equipment (ranging from €146 to €201) and contrast agent (€61 in average). As the unit cost of MRI reimbursed by the French national health insurance perspective is dependent on the characteristics of equipment (date of acquisition and volume of activity), we varied the unit cost between €276 and €331 to cover the range of possible situations.

Table S1. Cost analysis varying the unit cost of MRI

	Mean cost (in €)		Mean cost difference
	per patient		(MRI versus No MRI) [95%CI]
Unit cost of MRI	MRI n=173	No MRI n=172	Bootstrap n=10,000
Lower : 276€	9,937	9,680	257 [-521; 1,038]
Upper : 331€	9,993	9,684	309 [-466; 1,066]

MRI: magnetic resonance imaging

2) Impact of missing data for sick leaves and transportations on the mean cost per patient

Information on sick leaves and transportation was collected via a questionnaire. In total, there were 150 questionnaires out of 360 expected, which makes 60% of missing data. It was therefore chosen to make a sensitivity analysis by removing this information.

Table S2. Cost analysis excluding sick leaves and transportations

Mean cost (in €) per patient		Mean cost difference
		(MRI versus No MRI) [95%CI]
MRI	No MRI	Bootstrap n=10,000
n=173	n=172	
7,282	7,078	204 [-231; 655]

MRI: magnetic resonance imaging

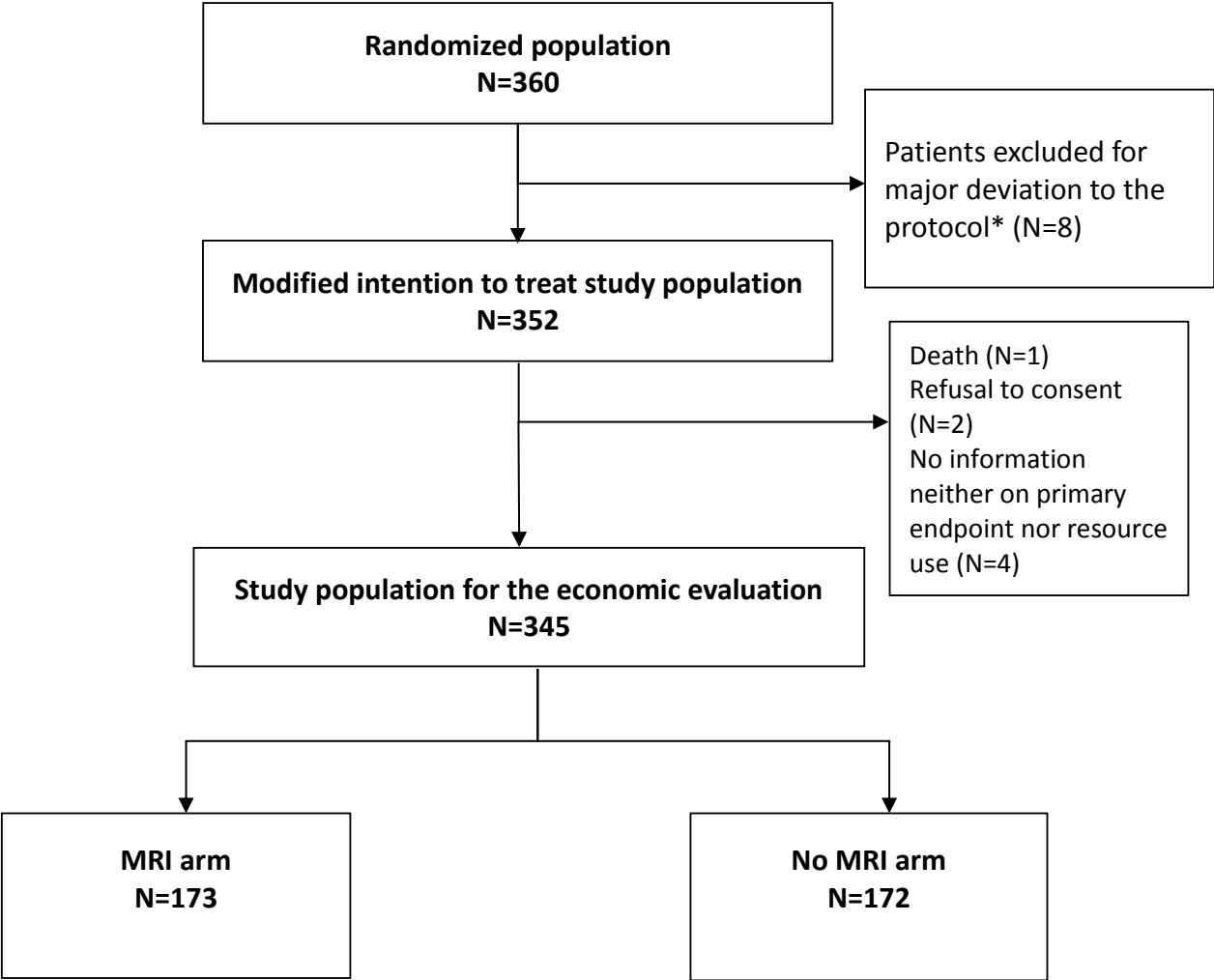
3) Cost-effectiveness analysis excluding the cost of re-interventions for positive or close margins

Table S3. Cost analysis excluding the cost of re-interventions for positive or close margins

	MRI	No MRI	Difference [95%CI]
	n=173	n=172	(MRI versus No MRI)
			Bootstrap n=10,000
Mean cost per patient (€)	9,314	8,750	564 [-230; 1,329]

MRI: magnetic resonance imaging

Figure S1: Flow-chart



*2 patients who did not consent to the study, 3 patients who had a tumor greater than 5cm, 1 patient with more than 1 malign breast lesion, and 2 patients with more than 1 cluster of microcalcifications were excluded.

MRI: magnetic resonance imaging

Figure S2. Cost-effectiveness acceptability curves (CEAC) for MRI versus No MRI varying the unit cost of MRI and without the cost of sick leaves and transportation (10,000 bootstrap replications). The CEAC represents the probability that preoperative MRI is cost-effective compared to standard imaging for various willingness-to-pay thresholds

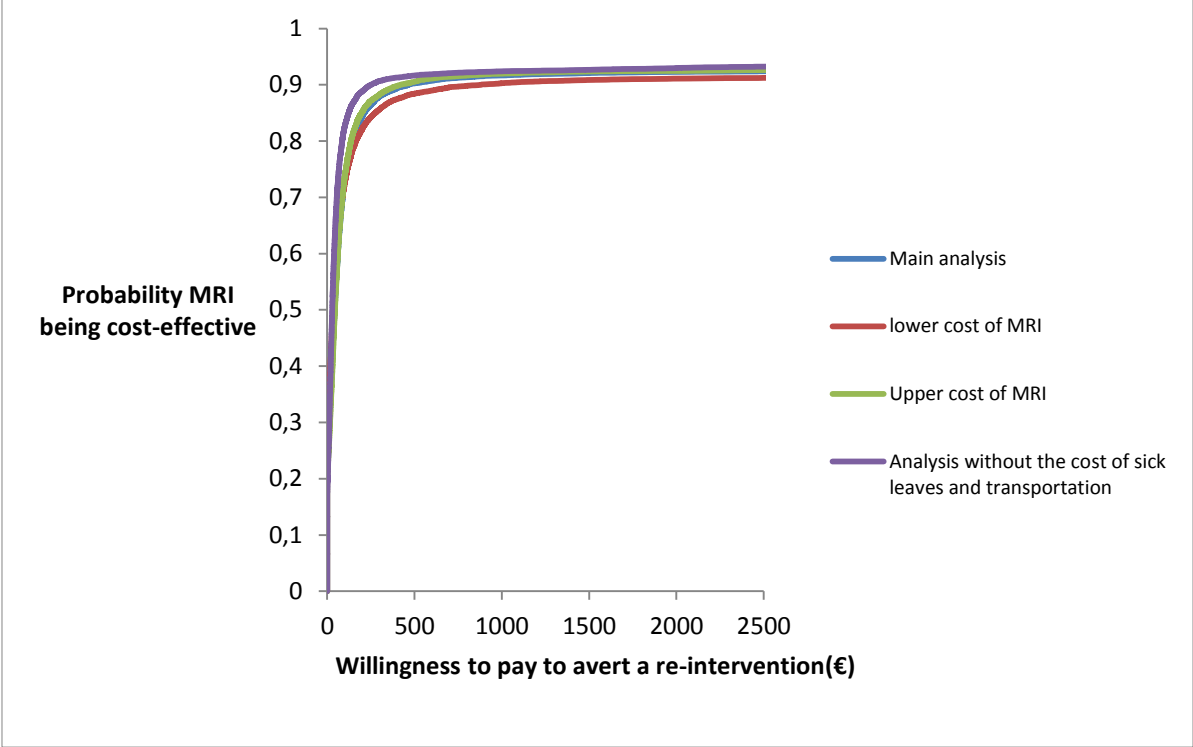
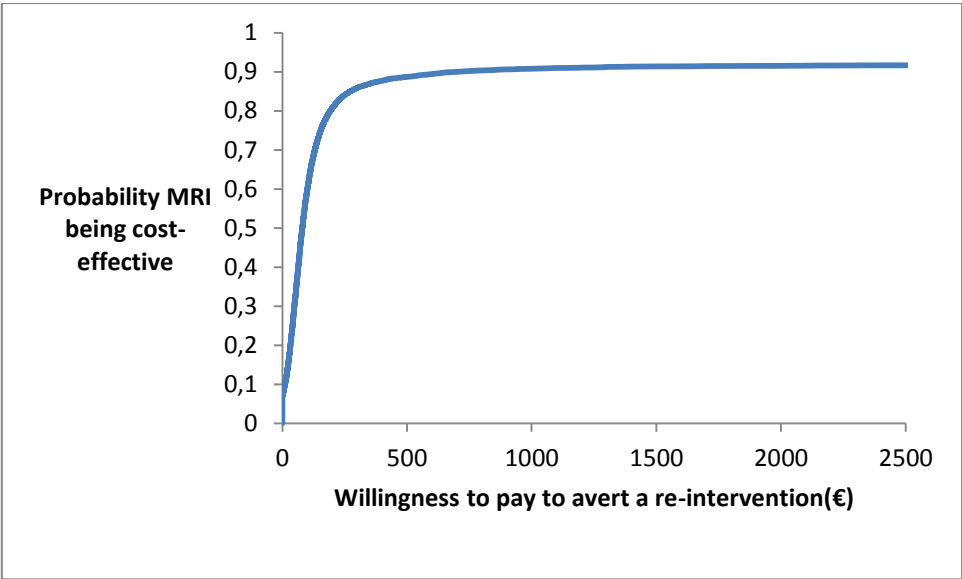


Figure S3. Cost-effectiveness acceptability curve (CEAC) for preoperative MRI versus standard imaging excluding the cost of re-interventions for positive or close margins (10,000 bootstrap replications). The CEAC represents the probability that preoperative MRI is cost-effective compared to standard imaging for various willingness-to-pay thresholds



At a willingness to pay of € 500 to avert a re-intervention for positive or close margins, the probability that MRI is cost-effective is 89%.