Cost-effectiveness of 82-Rubidium PET myocardial perfusion imaging for the diagnosis of myocardial ischemia depending on the prevalence of coronary artery disease

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SUPPLEMENTARY MATERIALS

Table S1. Calculation method, data sources and valuation used to calculate the cost of Rb-PET-MPI (procedural and follow-up costs)

	Calculation method	**Sources of data**	**Valuation**
Human resources	Cost of staff = Σ (hourly personnel cost x time of attendance x number of people)	The number and type of staff, the duration of the interventions and the time spent in the radiology room are collected during microcosting.	The hourly personnel cost is calculated on the basis of the salary and charges for the average grade of each type of staff [1] (Table S2). We consider that a person worked 1,607 hours during the year.[2]
Material, supplies and drugs	Cost of consumables = Σ (purchase price of a consumable x number of consumables)	The different consumables are collected during microcosting	The unit prices of generator, infusion system and other supplies are provided by the company A.A.A (Advanced Accelerator Applications) have been valued at their purchase price (Table S3). The unit prices of drugs have been valued at their purchase price. (Table S3).
Intervention room	Cost of the intervention room = room cost per hour x room occupancy	The duration of the procedure is collected during microcosting.	The cost of the radiology room is extracted from the 2012 cost accounting of Beaujon hospital. We consider that during this year, the intervention room operated 8 hours a day for 250 working days.

ICA admission	Cost of hospital stay = (cost of the stay for the DRG / average length of stay observed in DRG) x Length of Stay	The length of stay of each patient and the Diagnosis-Related Group (DRG) are collected from the hospital billing database	The cost of the hospitalizations is valued using GHS cost (ATIH 2013).[3]
Follow-up admissions	hospitalizations cost = ∑ (GHS tariff)	The length of stay of each patient and the DRG are collected from the hospital billing database.	The cost of the hospitalizations is valued using GHS cost (ATIH 2013).[3]

[1] B. Hagenmuller, L. Geoffroy, E. Guyader, J. Lignon, D. Rouquette, M. Beudaert, B. de la Chapelle, B. Chenais, A. Desmoulières, and P. Thurat, Guide pour le suivi de la masse salariale dans les établissements publics de santé. Ministère de l'emploi et de la solidarité, 06-Jul-2001.
[2] Code du travail - Article L3123-1. Available online:https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000033020098. (Accessed on 12-Apr-2020).
[3] Financement et données financières, ATIH. Available online: http://www.atih.sante.fr/tarifs-mco-et-had. (Accessed on 12-Apr-2020).

Table S2. Hourly cost of human resources of Rb-PET-MPI intervention

Staff	Total employer cost inclusive of taxes (€)	Cost per hour (€)
Radiology technician	51,468	32.0
Senior physician	137,494	85.6

Table S3. Unit cost of supplies and drugs used on Rb-PET-MPI procedure

Material, supplies and drugs		Unit price (€)	Price (€)/patient
One use only			
CardioGen-82 accessories	Patient Administration Sets (25sets- 1per patient)	480	19.20
	Assembly Extension Tubing (15 per box- 1per patient)	72	4.80
DIPYRIDAMOLE 10 MG/2 ML		0.58	0.58
AMINOPHYLLINE 250 MG/10 ML		1.63	1.63
Seven-week use (lifetime generator) : Base case			
CardioGen-82 Generator		32,670	155.57
Infusion System		1,800	8.57

CardioGen-82 accessories	Accessory Pack	120	0.57
	Waste Bottle	36	0.17
	Elution Test Vials	84	0.40
	Elution Test System	720	3.43
	Elution Vial Shield	42	0.20
	Thermal Printer paper	30	0.14

Table S4. Resources used in Tc-SPECT-MPI procedure

Tc-SPECT-MPI	**French Heathcare reimbursement (€)**	**Unit price (€)**
Myocardial perfusion tomoscintigraphic acquisition	319.4	_
Pharmacological stress (dipyridamole)	_	0.6
Stress test on a treadmill or ergometric bicycle	76.8	_
Resting Myocardial perfusion tomoscintigraphic acquisition	316.8	_
Radiopharmaceutical (99mTc-Sestamibi)	_	45.5