

Supplementary material

Elicitation questionnaire

Section I = introduction (about the survey and the studied device)	
Do you know the medical device Y-STRUT®?	YES, already used/prescribed YES, but non-used/prescribed NO, never heard about it
How did you know about this questionnaire?	Scientific society, federation or study group Journal, newspaper or newsletter Direct contact by the PhD student Other: specify
Do you want more information about this product and/or the results of this survey?	YES / NO
Have you already answered this survey, even incompletely? (this question enables to avoid duplicates)	YES / NO
Section II = about the practitioner	
You are?	A man / A woman
What is your age?	Less than 35 years old 35-45 years old 45-55 years old More than 55 years old
Professional experience?	Less than 10 years 10-20 years 20-30 years More than 30 years
What is your workplace in Hospital? *	University Hospital Centre (CHU) Regional University Hospital Centre (CHRU) Hospital Centre (CH) Private
Where do you work? (French department)	Selection of a French department Orthopedic surgeon Rheumatologist Geriatrician
What is your specialty?	Interventional radiologist Oncologist Radiotherapist Other: specify
In which indication(s) are you likely to be interested in this device? *	Orthopedics-traumatology indication Oncological indication
Section IIIA = Orthopedics-traumatology indication	
In relation to the studied device, will you be?	User / Prescriber / Both
How many patients with a hip fracture due to osteoporosis do you see per month in average?	< 5 / 5-12 / 12-20 / > 20 / NK
Estimated annual total?	< 10 / 10-20 / 20-50 / 50-100 / 100-200 / 200-300 / 300-500 / > 500 / Unknown
Which type of hip fracture do you see?	Mostly per trochanteric fractures Mostly femoral neck fractures Both equally NK
What is the cause of their hip fracture?	Mostly a simple fall from its height Mostly a fall from bed Mostly a fall in the stairs A little bit of everything Other: specify NK
What is the history of fractures of these patients? *	1 vertebra / Several vertebrae / Wrist / Other / NK
How many contralateral hip fractures do you see per year in average?	0-5 / 5-10 / 10-20 / 20-50 / > 50 / NK
Your patients suffering for hip fracture(s) are?	Mainly women Mainly men Both equally
How old are these patients in majority?	Less than 65 years old

	65-75 years old 75-85 years old More than 85 years old
Where do these patients live BEFORE contralateral hip fracture?	Mostly at home Mostly in a health care facility Both equally NK
Where do these patients live AFTER contralateral hip fracture?	Mostly at home Mostly in a health care facility Both equally NK
Osteoporosis diagnosed before fracture?	Mostly YES / Mostly NO / Both equally / NK
Medical treatment for osteoporosis before the first hip fracture?	YES / NO / NK
Which medical treatment is prescribed in majority?	Bisphosphonates / Calcium-vitamin D / Estrogen / Denosumab / THS / Teriparatide / PTH / strontium ranelate / other: specify
Which fixation material do you use for hip fracture treatment?	Nail Screw and plate Both Other: specify I do not operate
What are the main criteria of material choice for hip fracture treatment? *	Fracture type Pain Stability, rehabilitation Easy-to-use Material availability Cost NK
Which anesthesia is the most used for hip fracture treatment?	Mostly general anesthesia Mostly spinal anesthesia Both similarly Other: specify NK
What is the mean surgical time (without complications) for hip fracture treatment?	< 30min / 30-60 min / > 1h / > 2h / NK
Do you prescribe a medical treatment for osteoporosis after the first hip fracture?	Mostly YES Mostly NO I am not a prescriber
What is the mean life expectancy for patients after the FIRST hip fracture with the usual medical/surgical treatment?	< 1 month < 6 months < 12 months > 12 months NK
How many deaths per year do you estimate at 1 year after the FIRST hip fracture with the usual medical/surgical treatment?	0-5 / 5-10 / 10-15 / 15-20 / > 20 / NK
What is the mean life expectancy for patients after the SECOND hip fracture (contralateral) with the usual medical/surgical treatment?	< 1 month < 6 months < 12 months > 12 months NK
How many deaths per year do you estimate at 1 year after the SECOND hip fracture with the usual medical/surgical treatment?	0-5 / 5-10 / 10-15 / 15-20 / > 20 / NK
What reduction in the risk of contralateral fracture at 1 year would lead you to use this new implantable medical device in prevention?	30% / 50% / 70% / 90% / NK
Which benefit(s) would lead you to use/prescribe this new device? *	Refracture rate at 1 year Life expectancy at 1 year Quality of life Comorbidities Patient's dependency I do not see benefit, I will not use/prescribe it
Which risk(s) would lead you to not use/prescribe this new device? *	Surgical risk Not enough clinical experience I think that the benefits-to-risks ratio is unfavorable Other: specify I do not see major risk, this device is a good solution

What would be your prevention strategy of the contralateral hip with this new implantable medical device?	Simultaneously with the 1st fracture treatment Postponed No prevention NK Before hospital exit At the 1-month visit At the 3-month visit After 6 months
Post-poned prevention strategy?	
Will you be willing to use/prescribe this new implantable medical device in prevention?	YES / NO / NK
Are you satisfied by the questionnaire?	(scale) 100: absolutely, 0: not satisfied at all
Section IIIB = Oncology indication	
In relation to the studied device, will you be?	User / Prescriber / Both
How many patients with metastatic pre-fractural lesions at the proximal femur do you see per month in average? Estimated annual total?	< 5 / 5-12 / 12-20 / > 20 / NK < 10 / 10-20 / 20-50 / 50-100 / 100-200 / 200-300 / 300-500 / > 500 / NK
Which type of lesions do you see at the proximal femur in majority?	Lesion at the femoral head Lesion at the femoral neck Per trochanteric lesion Lesion at the diaphysis All locations equally NK
How many hip fractures linked to these lesions do you see per year in average?	< 10 / 10-20 / 20-50 / 50-100 / 100-200 / 200-300 / 300-500 / > 500 / NK
What is the mean life expectancy for patients after a hip fracture with the usual medical/surgical treatment?	< 1 month < 6 months < 12 months > 12 months NK
How many deaths per year do you estimate at 1 year after a hip fracture with the usual medical/surgical treatment?	0-5 / 5-10 / 10-15 / 15-20 / > 20 / NK
In accordance to the ECOG score, how do you classify the patients suffering from lesions at the proximal femur?	1: Mostly fully active 2: Mostly restrained in physical activities, but outpatient, professional activity or at home ok 3: Mostly outpatient, autonomous but without professional activities or at home 4: Mostly poor, assisted/bedridden more than 50% of the day 5: Mostly disabled, permanently assisted/ bedridden, with assistance All proposals equally NK
Medical treatment for osteolytic metastasis pre-fractural lesions at the proximal femur?	YES / NO / NK
Which medical treatment is prescribed in majority?	Chemotherapy Local radiotherapy Chemotherapy + local radiotherapy Other: specify Embolization Ablation (radiofrequency or cryotherapy)
Which local treatment is often associated? *	Radiotherapy Other: specify No treatment NK
Which type of primary cancer is associated to osteolytic metastasis at the proximal femur in majority? *	Lung / Breast / Prostate / Kidney / Melanoma Other: specify / NK Mainly NO
Do you propose to these patients a preventive treatment for proximal femur fracture?	Mainly YES, addressed to the orthopedics service Mainly YES, addressed to a multidisciplinary meeting Other: specify
What is the main decision criterium for proximal femur fracture prevention?	Mirels' score / Pain / ECOG / Other: specify / NK
About the Mirels' score1	Choice between 3 and 12
About the pain	Choice between 1 and 10
About the ECOG score	Choice between 1 and 5

Which preventive treatment do you propose, in majority, against proximal femur fracture?	Osteosynthesis in the orthopedics service Screwing + cementoplasty Cementoplasty alone I do not do prevention Other: specify Size of the lesion Pain Easy-to-use Material availability Cost NK Mostly general anesthesia Mostly spinal anesthesia Both similarly Other: specify NK
What is(are) the main criterium(a) of choice for proximal hip fracture prevention?	In the orthopedics operative room (OR) In the interventional radiology OR
Which anesthesia is the most used for proximal hip fracture prevention?	< 30min / 30-60 min / > 1h / > 2h / NK
Where is done the preventive treatment in majority?	Refracture rate at 1 year Life expectancy at 1 year Quality of life Comorbidities Patient's dependency
What is the mean surgical time (without complications) for proximal hip fracture prevention?	I do not see benefit; I will not use/prescribe it Surgical risk Not enough clinical experience
Which benefit(s) would lead you to use/prescribe this new device? *	I think that the benefits-to-risks ratio is unfavorable Other: specify
Which risk(s) would lead you to use/prescribe this new device? *	I do not see major risk; this device is a good solution
Will you be willing to use/prescribe this new implantable medical device in prevention?	YES / NO / NK
Are you satisfied by the questionnaire?	(scale) 100: absolutely, 0: not satisfied at all

* several responses possible; NK=unknown; ¹ Mirels classification- Metastatic disease in long bones and impending pathologic fracture - Jawad et al. 2010 [1]

1. Jawad, M.U.; Scully S.P. In brief : Classifications in brief: Mirels' classification: Metastatic disease in long bones and impending pathologic fracture. *Clin. Orthop. Relat. Res.* **2010**, *468*, 2825–2827.