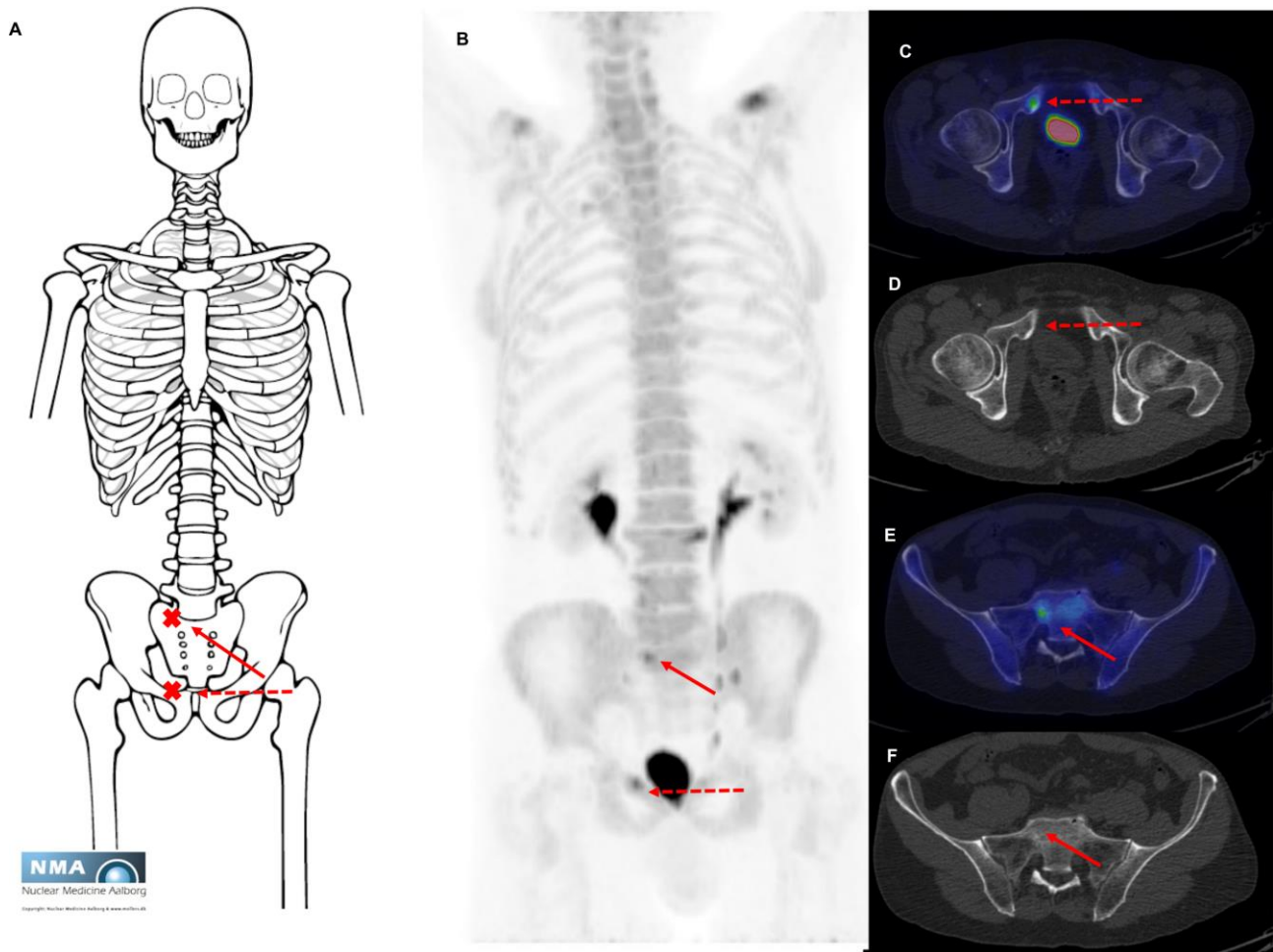


Supplemental Figure 1.



An example of disagreement on a patient level between the reviewers: One observer considered the patient M1 with two bone metastases, whereas, the other observer considered the same two lesions equivocal. The schematic drawing used to report the findings is shown in (A) with the two marks in red assigned by one of the observer and the corresponding maximum NaF PET intensity projection (B). The dotted arrow (in A and B) shows the lesion in the pubic bone with corresponding axial fused image in (C) and low dose CT in (D). The full arrow (in A and B) shows the lesion in the sacral bone with corresponding axial fused image (E) and low dose CT (F). No corresponding changes in CT was seen for any of the lesions, which may in part explain the difference in interpretation. Illustration (A) is copyright of Nuclear Medicine Aalborg, printed with permission of Nuclear Medicine Aalborg.

Supplemental Table 1. Detailed description of the 19 subjects where the readers disagree on the skeletal status.

Patient number	Stage of PCa at the time of NaF PET/CT	PSA (ng/mL)	Age (years)	Gleason score	Clinical T-stage	NaF-PET/CT 3- point scale* Observer 1	NaF-PET/CT 3- point scale* Observer 2	Consensus of two observers 3-point scale*	Final diagnosis, patient level
1	Primary staging	7	62	7	cT1c	M0	Equivocal, one lesion	Equivocal, one lesion	M0
2	Primary staging	11	71	7	cT1c	M0	Equivocal, one lesion	Equivocal, one lesion	M0
3	Primary staging	79	61	7	cT3b	Equivocal, one lesion	M1, one lesion	M1, one lesion	M1
4	BCR	0,3	75	7	cT1	Equivocal, one lesion	M1, two lesions	M1, one lesion	M1
5	Primary staging	5,8	62	7	cT1c	Equivocal, one lesion	M0	Equivocal, one lesion	M0
6	Primary staging	11	73	7	cT2a	M0	Equivocal, one lesion	M0	M0
7	Primary staging	6,6	69	7	cT1c	M0	Equivocal, two lesions	M0	M0
8	Primary staging	6,6	69	7	cT1c	M0	Equivocal, one lesion	M0	M0
9	Primary staging	5,1	63	9	cT1c	M0	Equivocal, one lesion	M0	M0
10	Primary staging	6,1	61	7	cT1c	M0	Equivocal, two lesions	M0	M0

11	Primary staging	6,3	60	6	cT2b	M0	Equivocal, one lesion	M0	M0
12	BCR	0,9	60	8	cT2	M0	M1, one lesion	M1, one lesion	M0
13	BCR	5,7	78	7	cT2	M0	Equivocal, one lesion	M0	M0
14	BCR	2	72	7	cT2	M0	Equivocal, superscan or metabolic bone disease	M0	M0
15	BCR	0,8	72	7	cT1	M0	Equivocal, one lesion	M0	M0
16	Primary staging	17	68	7	cT1c	M1, two lesions	Equivocal, two lesions	Equivocal, two lesions	M0
17	BCR	0,6	55	6	cT1	M0	Equivocal, two lesions	M0	M0
18	BCR	3,3	71	7	cT3	M0	Equivocal, one lesion	Equivocal, one lesion	M0
19	Primary staging	10	72	7	cT1c	M0	Equivocal, one lesion	M0	M0

* Three-point scale: No bone metastasis, equivocal, bone metastasis present.

BCR: biochemical recurrence, M0: No bone metastases, M1: bone metastases present.