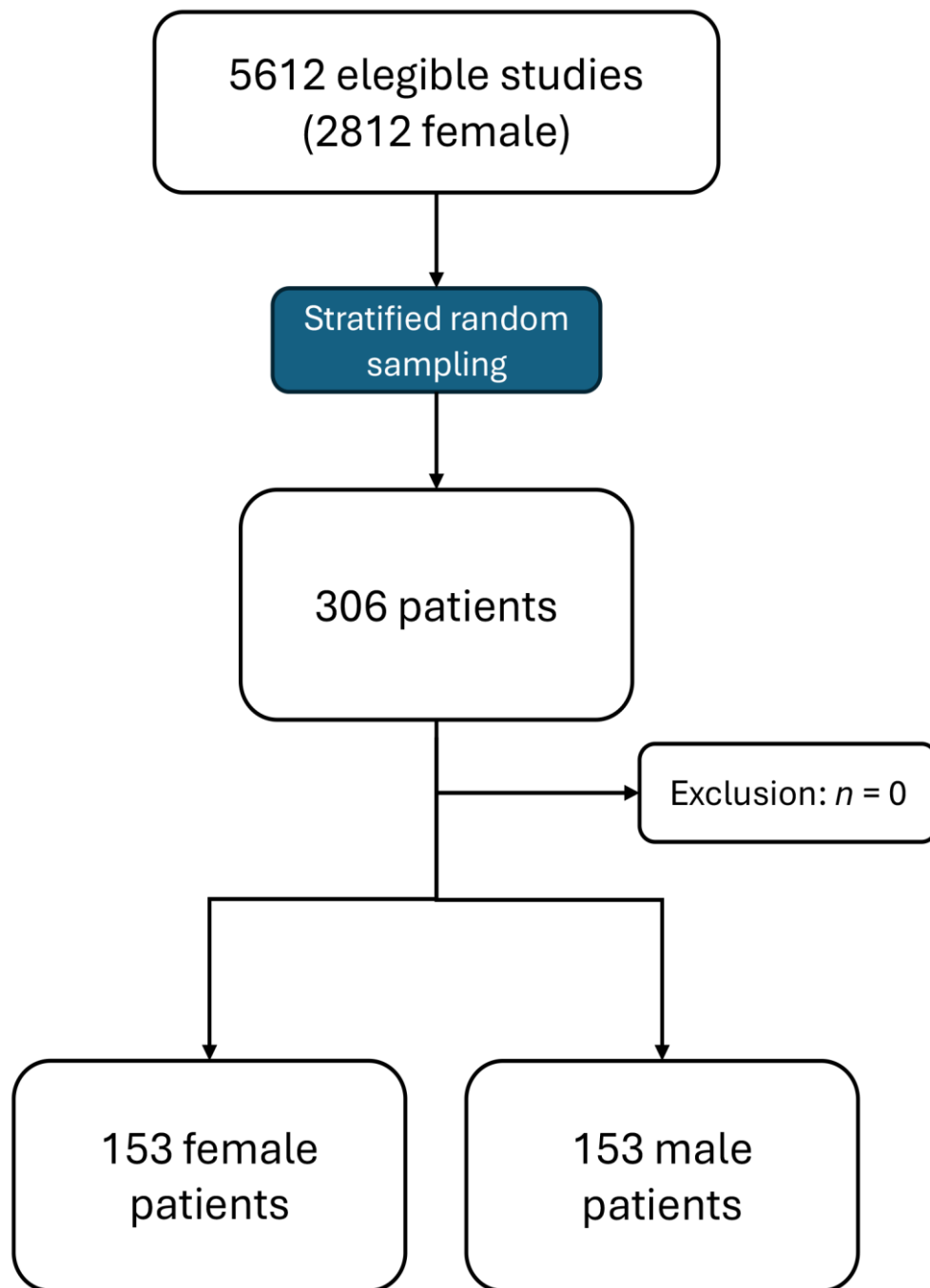


**A critical comparative study of the performance of three AI-assisted
programs for bone age determination**

ELECTRONIC SUPPLEMENTARY MATERIAL



Supplemental Fig 1 Inclusion flowchart for the study cohort, published in (15).

Supplemental table 1: Demographic data of the study population, published in (15).

Study population

Patients (#)	306
Gender	153 Female
Age (y)	9.5 ($\pm$ 4.9)
Height (cm)	131.1 ($\pm$ 30.0)
Weight (kg)	35.3 ($\pm$ 23.2)
BMI (kg/m²)	18.3 ($\pm$ 6.3)

BMI: Body mass index

Supplemental table 2 Prediction error for bone age in the entire patient population (see * for BoneView) for the three software programs, without BoneView rounding to Greulich and Pyle age categories (not available in the commercial version)

	BoneXpert (n=299)			BoneView * (n=244)			PANDA (n=306)		
	Female	Male	<i>Total</i>	Female	Male	<i>Total</i>	Female	Male	<i>Total</i>
RMSE (y)	0.58	0.66	0.62	0.60	0.69	0.65	0.79	0.72	0.75
MAE (y)	0.46	0.51	0.48	0.49	0.52	0.51	0.58	0.54	0.56
Mean Error (y)	0.09	0.30	0.19	-0.07	-0.23	-0.15	-0.21	0.28	0.04

RMSE: Root mean squared error; MAE: Mean absolute error.

* BoneView, in contrast to BoneXpert and PANDA, rejects analysis if CA is less than 3 years. Thus, the table does not reflect BoneView's ability to analyse the entire patient population (i.e. no children below 3 years chronological age)

Supplemental table 3 Extent of prediction error for bone age in the subgroup of the common age range for bone age determination without BoneView rounding to Greulich and Pyle age categories (not available in the commercial version)

	BoneXpert (n=203)			BoneView (n=197)			PANDA (n=206)		
	Female	Male	<i>Total</i>	Female	Male	<i>Total</i>	Female	Male	<i>Total</i>
RMSE (y)	0.60	0.71	0.66	0.51	0.69	0.63	0.62	0.68	0.65
MAE (y)	0.47	0.56	0.52	0.45	0.51	0.48	0.48	0.52	0.50
Mean Error (y)	0.18	0.34	0.26	-0.03	-0.25	-0.15	0.00	0.24	0.13

RMSE: Root mean squared error; MAE: Mean absolute error.