

(mesh.u3d)

BeyondShape toolbox - Spine analyser report



Dott.ssa Angela Palomba

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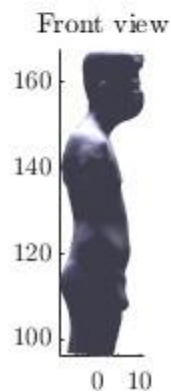
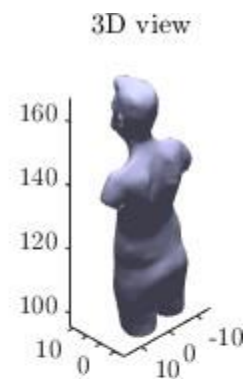
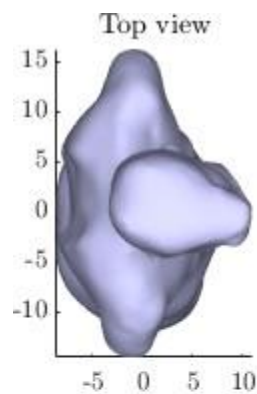
Subject's information:

First name:	Mario
Surname:	Rossi
Date of birth:	03/06/2006
Height [m]:	1.68
Weight [kg]:	58
Gender:	Male
BMI:	20.54

Modality of execution

Posture	Standard
Position of landmarks	Automatic
Alignment	Automatic

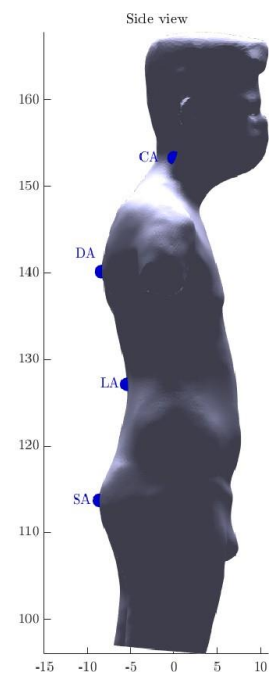
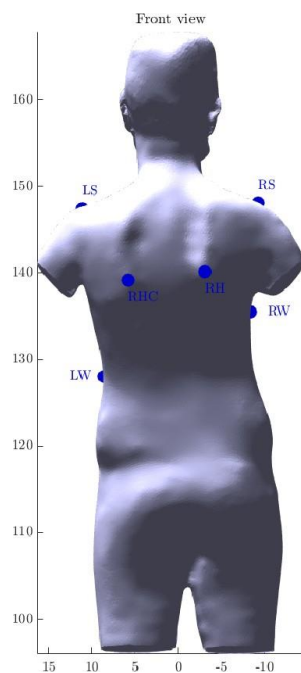
Planes of view



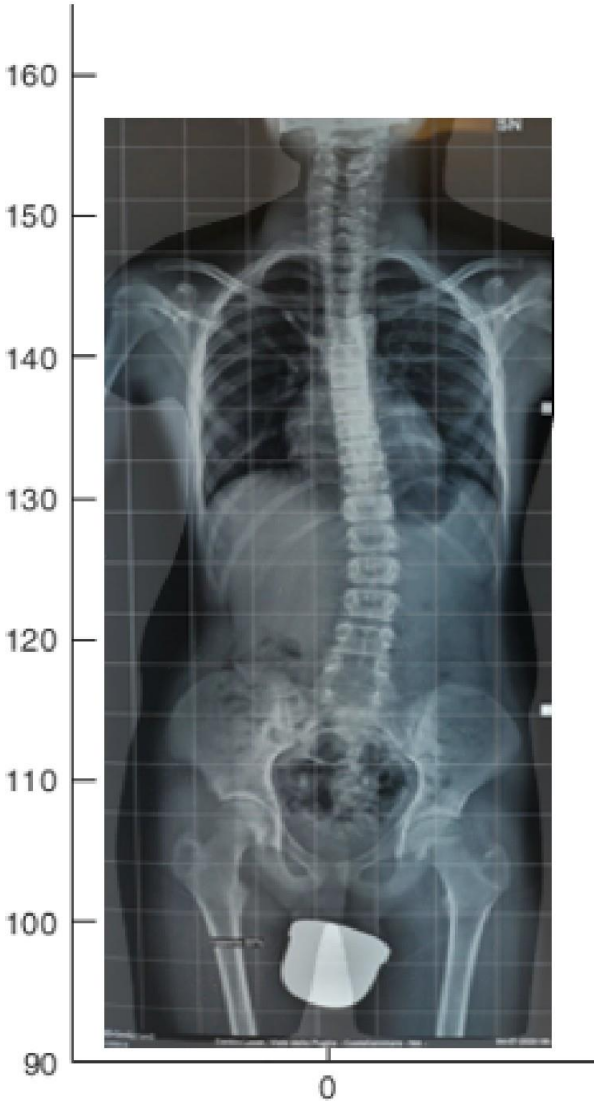
Anatomical landmarks

Label	Name	Value - x [cm]	Value - y [cm]	Value - z [cm]

RS	Right Shoulder (Acromion)	0.97	-9.27	148.10
LS	Left Shoulder (Acromion)	0.21	11.08	147.40
C7	C7 vertebra	-1.12	-0.94	154.58
RT	Right Greater Trochanter	0.39	-12.13	108.10
LT	Left Greater Trochanter	0.58	9.77	106.83
RH	Maximum bulging of rib hump	-8.37	-3.09	140.15
RHC	Maximum bulging of rib hump controlateral	-8.10	5.78	139.17
CA	Cervical apex	-1.12	-0.94	154.58
DA	Dorsal apex	-8.37	-3.09	140.15
LA	Lumbar apex	-5.43	2.45	127.14
SA	Sacral apex	-8.63	-3.94	113.72
RW	Right waist	0.81	-8.43	130.08
LW	Left waist	0.50	8.52	128.03

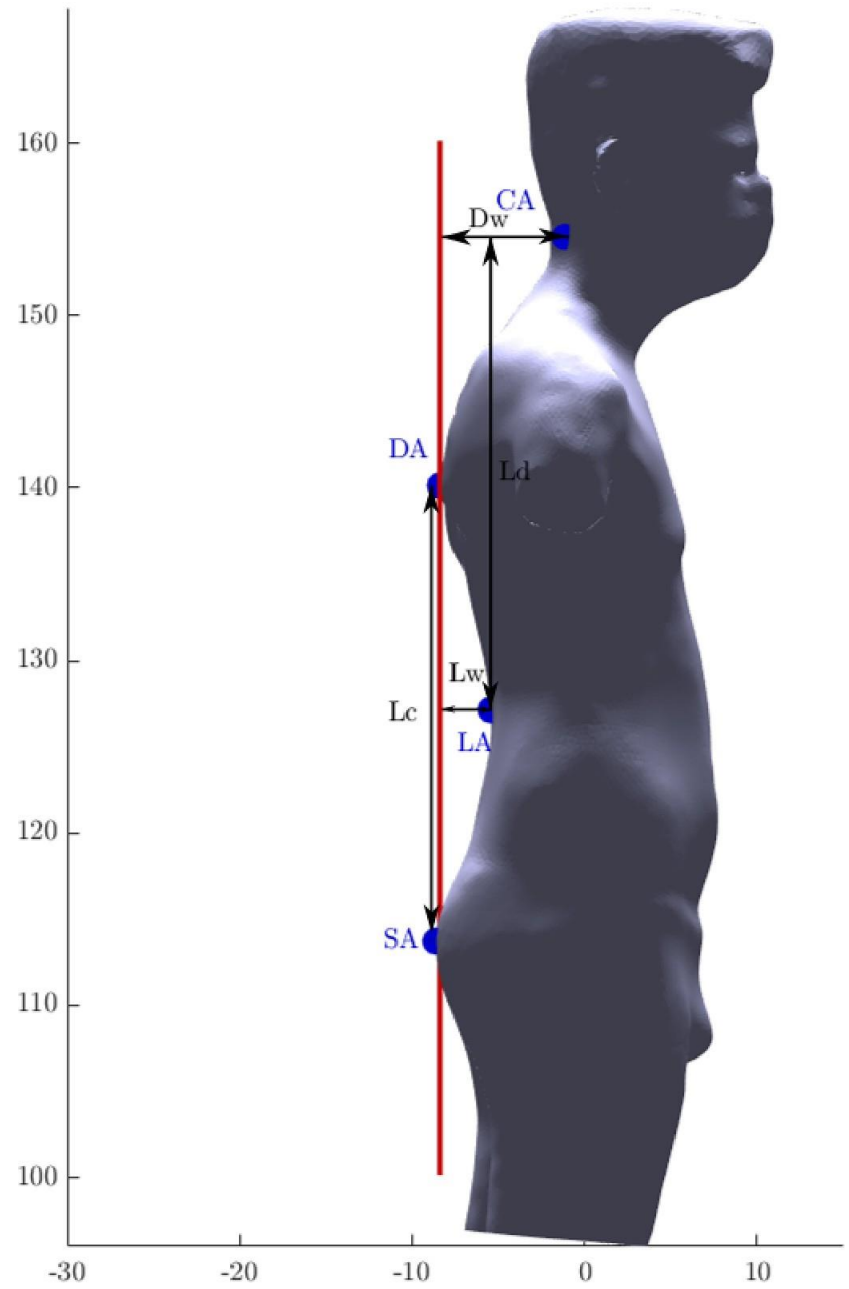


Rx alignment



Clinical parameters - Side View

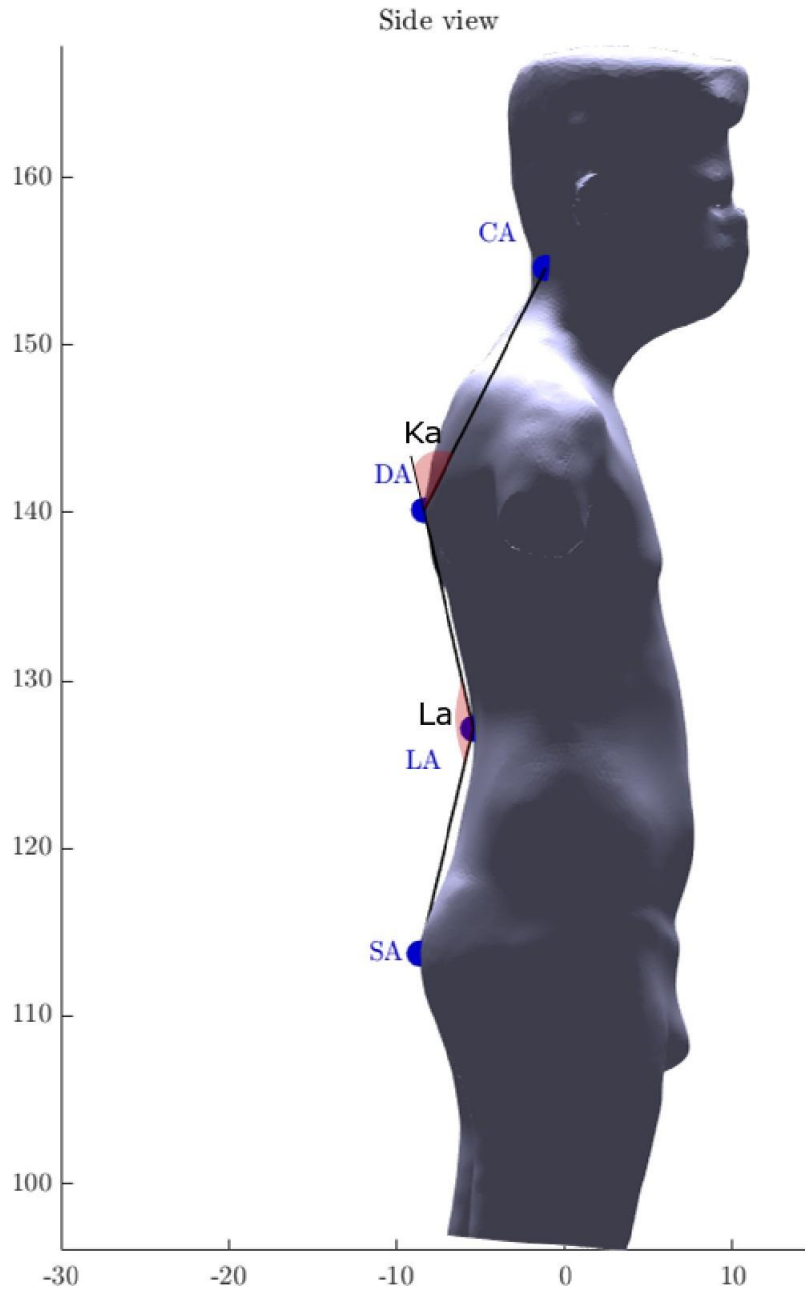
Side view



Label	Results	Unit of measure
RHw	2.70	[mm]
Dw	83.70	[mm]

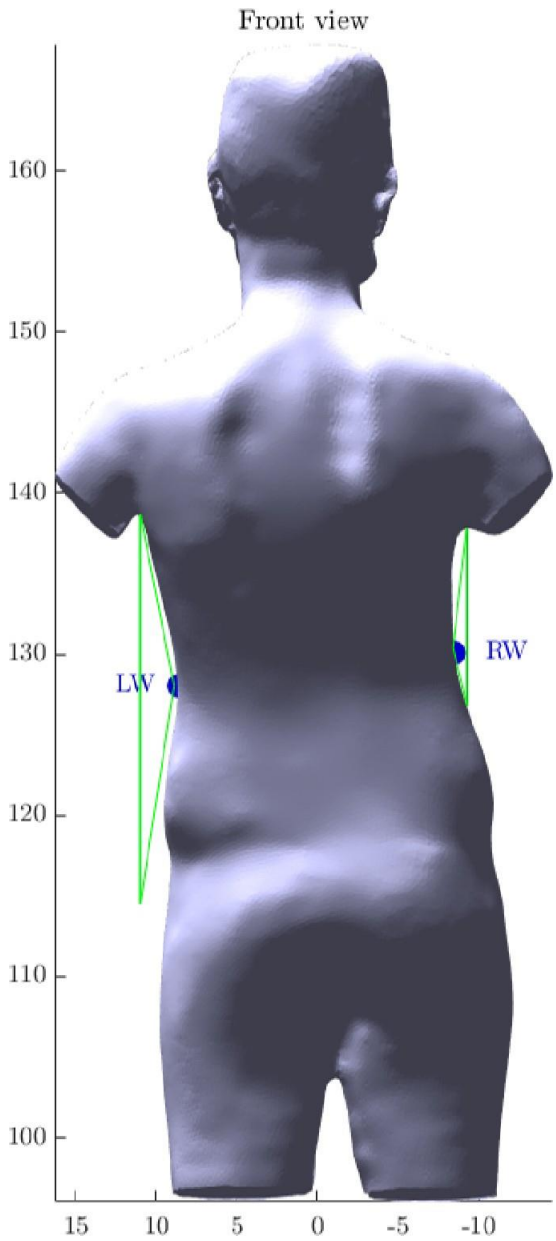
Dle	261.60	[mm]
Ki	31.89	[-]
Lw	29.30	[mm]
Lle	264.30	[mm]
Li	11.10	[-]
SB	6.00	[mm]
Si	83.00	[mm]
CB	9.40	[mm]
CW	60.00	[mm]
STw	7.00	[mm]
RHTw	9.80	[mm]
PTw	12.70	[mm]

Clinical parameters - Side View



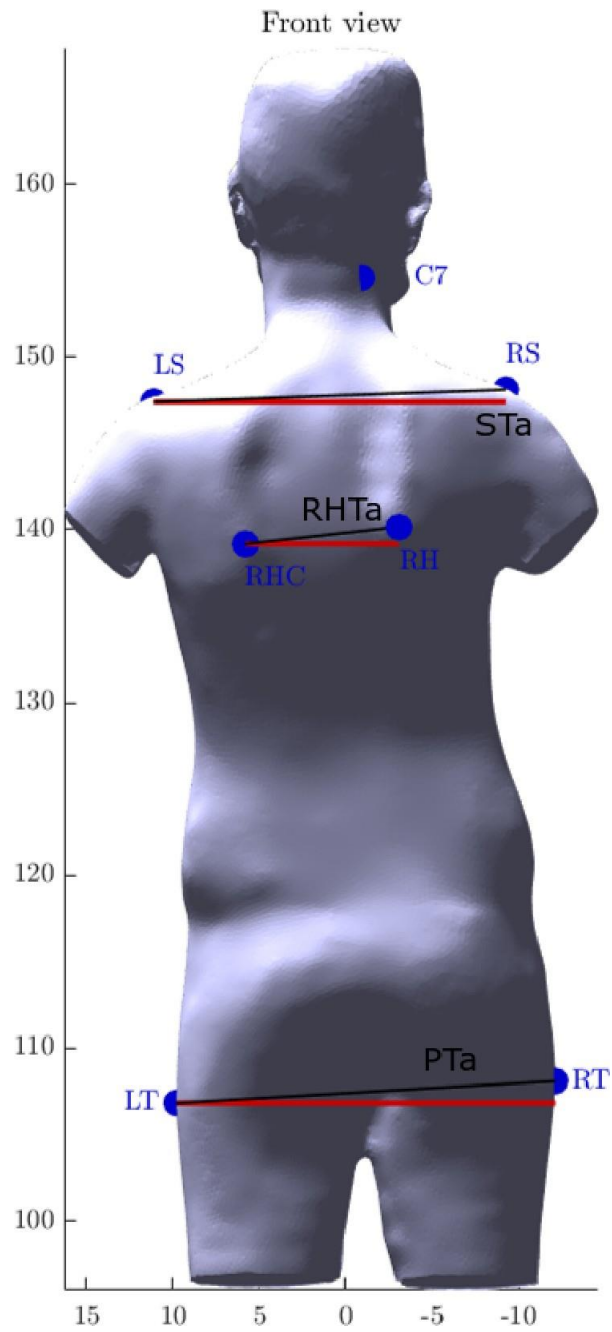
Label	Results	Unit of measure
Ka	43.30	[deg]
La	157.90	[deg]

Clinical parameters - Front View



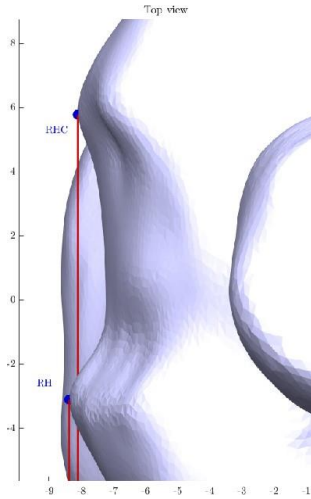
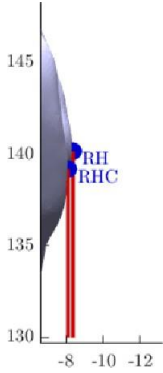
Label	Results	Unit of measure
WTa	6346	[mm^2]

Clinical parameters - Front View



Label	Results	Unit of measure
STa	1.8	[deg]
RHTa	5	[deg]
PTa	3.60	[deg]

Clinical parameters - Rib Hump analysis



Label	Results	Unit of measure
RHv	4.90	[mm ³]

Summary of the results

Label	Results	Unit of measure	Assessment
RHv	4.90	[mm ³]	
WTa	6346	[mm ²]	
RHw	2.70	[mm]	
Dw	83.70	[mm]	N.C.
Dle	261.60	[mm]	N.C.
Ki	31.89	[-]	
Lw	29.30	[mm]	N.C.
Lle	264.30	[mm]	N.C.
Li	11.1	[-]	
SB	6.00	[mm]	
Si	83.00	[mm]	
CB	9.40	[mm]	
CW	60.00	[mm]	
STw	7.00	[mm]	
RHTw	9.80	[mm]	
PTw	12.69	[mm]	
STa	1.80	[deg]	
RHTa	5.00	[deg]	
PTa	3.60	[deg]	
Ka	43.29	[deg]	
La	157.90	[deg]	
to monitor			

Spine analyser definitions

Label	Name	Unit of measure	Description
RHv	Posterior rib hump volume	[mm ³]	Posterior rib hump volume
WTa	Waist triangles surface area	[mm ²]	Waist triangles surface area on the coronal plane
RHw	Posterior rib hump width	[mm]	Posterior rib hump width: width of the posterior rib hump in the sagittal plane
Dw	Dorsal width	[mm]	the horizontal distance from the straight line to the peak point of dorsal curve
Dle	Dorsal length	[mm]	the vertical distance from C7 to the beginning of the lumbar curve
Ki	Kyphosis Index	[-]	a ratio of and the dorsal width and the dorsal length (Ki) = (D w/Dle x 100)
Lw	Lumbar width	[mm]	the horizontal distance from the straight line to the peak point of lumbar curvature
Lle	Lumbar length	[mm]	the vertical distance from the beginning to the end of the lumbar curve
Li	Lordosis Index	[-]	a ratio of and the lumbar width and the lumbar length (Li) = (L w/Lle x 100)
SB	Sagittal balance	[mm]	distance between the posterosuperior aspect of the S1 vertebral body and the plumb line
Si	Sagittal index	[mm]	maximum cervical and lumbar distances on the sagittal plane from the vertical tangent line to dorsal apex (DA)
CB	Coronal balance	[mm]	distance between the plumb line and the central point of the sacrum
CW	Coronal width	[mm]	maximum distance of the spinal midline from the plumb line
STw	Shoulder tilt width	[mm]	width from the horizontal planes of the right and left acromion
RHTw	Posterior rib hump tilt width	[mm]	width from the horizontal planes of the right and left posterior rib hump
PTw	Pelvic tilt width	[mm]	width from the horizontal planes of the right and left PSIS
STa	Shoulder tilt angle	[deg]	angle on the horizontal plane of the line between right and left acromion
RHTa	Posterior rib hump tilt angle	[deg]	angle on the horizontal plane of the line between right and left posterior rib hump
PTa	Pelvic tilt angle	[deg]	angle on the horizontal plane of the line between right and left PSIS
Ka	Kyphosis angle	[deg]	angle on the sagittal plane between the dorsal surface tangents
La	Lordosis angle	[deg]	angle on the sagittal plane between the lumbar surface tangents