

**Table S1. Mahalanobis distances between taxon means for the last thoracic vertebrae shape.**

	<b>Pathological humans</b>	<b>Orangutans</b>	<b>Chimpanzees</b>
<b>Healthy humans</b>	2.0798 p<0.0001*	3.5703 p<0.0001*	1.7574 p=0.006*
<b>Chimpanzees</b>	1.0980 p=0.9490	2.7921 p<0.0001*	
<b>Orangutans</b>	2.8741 p<0.0001*		

**Table S2. Mahalanobis distances between taxon means for first lumbar vertebrae shape.**

	<b>Pathological humans</b>	<b>Orangutans</b>	<b>Chimpanzees</b>
<b>Healthy humans</b>	2.7884 p<0.0001*	3.9399 p<0.0001*	2.0661 p<0.0001*
<b>Chimpanzees</b>	1.7036 p<0.1429	2.9034 p<0.0001*	
<b>Orangutans</b>	2.6087 p=0.0002*		