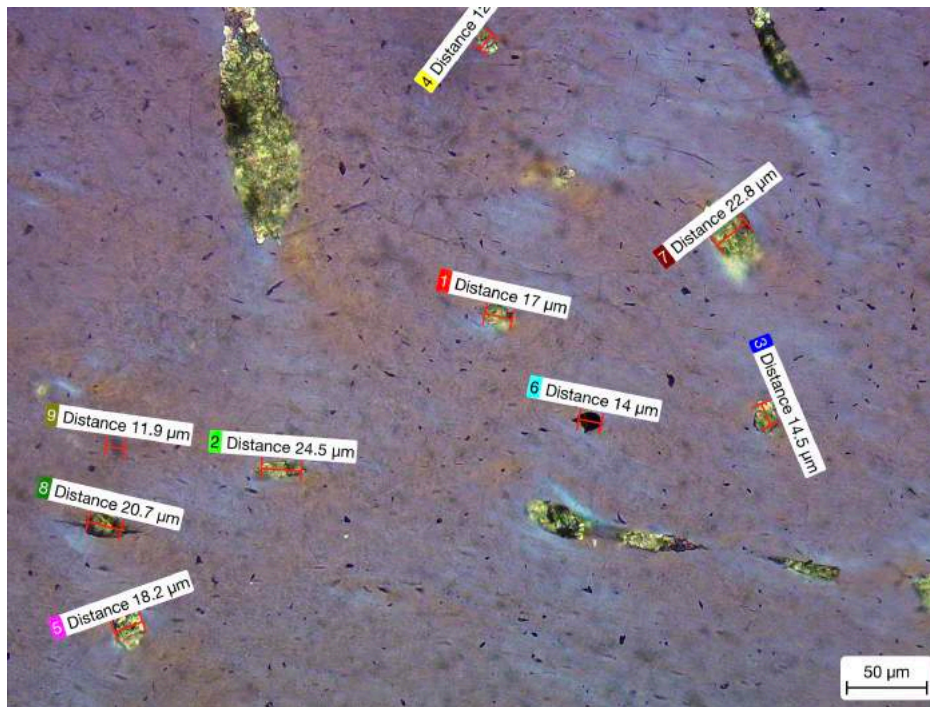


Table S5 Measurements of diameter of the vascular canals in adult stage of *Psittacosaurus lujiatunensis*.



IVPP V16902.1 left tibia

Measurements

ID *	Tool	Feature	Unit	Value
1-N-1	Distance	Distance	μm	26.3
1-N-2	Distance	Distance	μm	32
1-N-3	Distance	Distance	μm	31
1-N-4	Distance	Distance	μm	23.8
1-N-5	Distance	Distance	μm	36.1
1-N-6	Distance	Distance	μm	28.4
1-N-7	Distance	Distance	μm	31.2
1-N-8	Distance	Distance	μm	24.5
1-N-9	Distance	Distance	μm	27.2
1-N-10	Distance	Distance	μm	23.8
1-N-11	Distance	Distance	μm	24.1
1-N-12	Distance	Distance	μm	27.2
1-N-13	Distance	Distance	μm	21.6
1-N-14	Distance	Distance	μm	22.1
1-N-15	Distance	Distance	μm	28.2
1-N-16	Distance	Distance	μm	21.2
1-N-17	Distance	Distance	μm	19.5
1-N-18	Distance	Distance	μm	23.2
1-N-19	Distance	Distance	μm	31.8
1-N-20	Distance	Distance	μm	22.6
1-N-21	Distance	Distance	μm	28
1-N-22	Distance	Distance	μm	30.8

1-N-23	Distance	Distance	μm	22.2
1-N-24	Distance	Distance	μm	27.4
1-N-25	Distance	Distance	μm	24
1-N-26	Distance	Distance	μm	21.3
1-N-27	Distance	Distance	μm	23.6

Minimum layer thickness: 19.5

Maximum layer thickness: 36.1

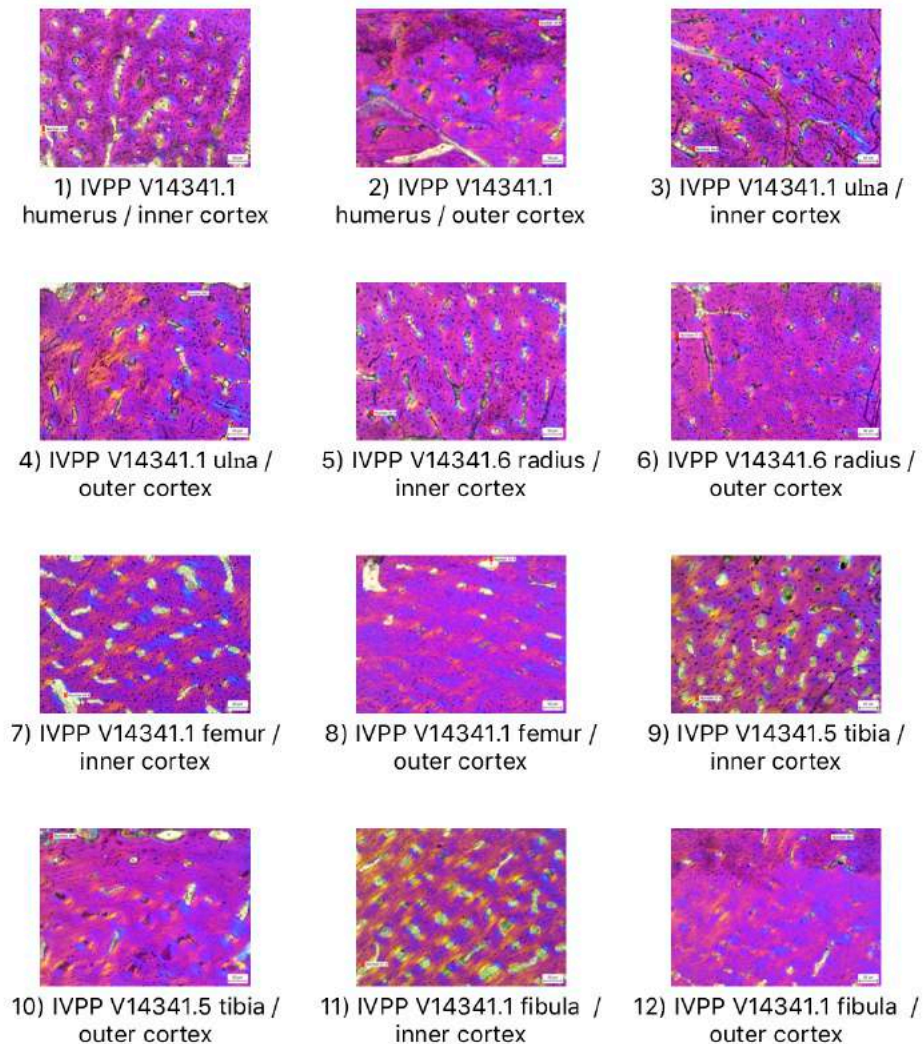
Average layer thickness: 26

Layer thickness standard deviation: 4.2

Table S6 Comparisons of the number of vascular canals in inner and outer cortex in juvenile stage of *Psittacosaurus lujiatunensis*.

Element	Number of vascular canals		Density of vascular canals (per mm ²)	
	Inner cortex	Outer cortex	Inner cortex	Outer cortex
Humerus	47	44	193	180
Ulna	46	36	189	148
Radius	44	31	180	127
Femur	44	33	180	135
Tibia	57	40	234	164
Fibula	57	46	234	189

All the images are taken by the integrated camera in the Zeiss Primotech at a magnification of 20x. The numbers of vascular canals are calculated by the tools in the software of the Zeiss Labscope.



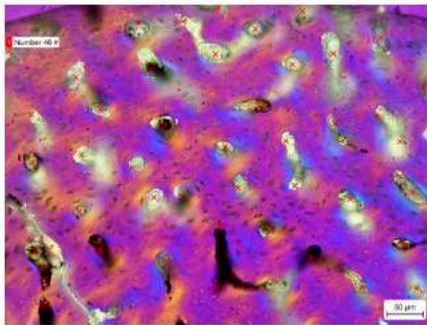
28 Nov 2018 at 10:31

2 / 4

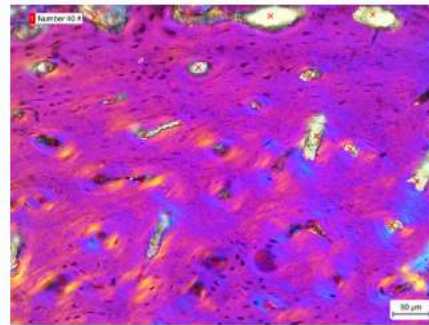
Table S7 Comparisons of the number of vascular canals in the outermost cortex of the tibia in each ontogenetic stage of *Psittacosaurus lujiatunensis*.

Specimen number	Ontogenetic stage	Number of vascular canals	Density of vascular canals (per mm ²)
IVPP V16902.1	Hatchling	46	189
IVPP V14341.5	Juvenile	40	164
IVPP V18344	Subadult	31	127
IVPP V12617	Adult	12	49

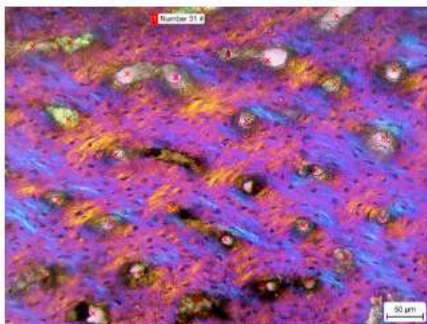
All the images are taken by the integrated camera in Zeiss Primotech at a magnification 20x. The numbers of vascular canals are calculated by the tools in the software of the Zeiss Labscope.



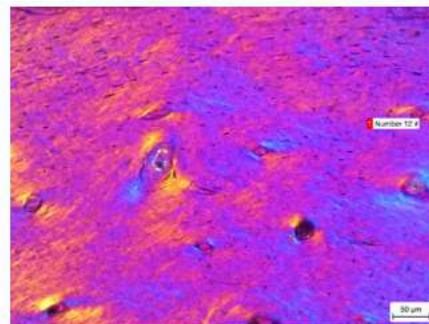
1) IVPP V16902.1 tibia / 012-02



2) IVPP V14341.5 tibia / 003-02



3) IVPP V18344 tibia / 002-02



4) IVPP V12617 tibia / 001-02