

Lamellar/Woven Database

Animal	Group	Lamellar Endosteal Area	Lamellar Periosteal Area	Cortical Area	Medullary Area	Total Area
Control						
D1	1	477754	180909	3911250	4148090	8059340
D2	1	550802	123201	3629180	2958810	6587990
D3	1	77139.9	722781	4138760	3595900	7734660
D4	1	926580	133218	3612140	3794700	7406840
D5	1	564687	119948	4177870	4526110	8703980
D6	1	720577	130303	4185200	3207680	7392880
D7	1	665475	23694.8	3476240	4434390	7910630
D8	1	530123	72310.2	4415290	2751230	7166520
D9	1	780116.9	1079940	3656260	4095820	7752080
D10	1	876220	296138	3110600	3483690	6594290
D11	1	1019140	396683	3971130	4415760	8386890
D12	1	586851.3	0	3717870	3546210	7264080
D13	1	385235.7	0	4040490	3943800	7984290
D14	1	781989.6	1295.6	3938210	3375370	7313580
Mean		638763.6714	234315.8286	3855749.286	3734111.429	7589860.714
St. Dev		242606.8871	312298.5578	343238.2999	556240.2716	609638.1661
CV		2.632916481	0.750294302	11.2334471	6.713126717	12.44977945
Dose 1 125ug						
D16	2	504856	14267.3	3512630	3820650	7333280
D17	2	284508	55475	3874230	4174420	8048650
D18	2	472804	105993	4955530	3274620	8230150
D19	2	640597	0	3896670	3765410	7662080
D20	2	347023	99213.6	3273960	3380000	6653960
D22	2	459777	61861.5	3646600	4295600	7942200
D23	2	390414	22054.6	4056610	3715060	7771670
D24	2	456770.6	130763.6	3618610	3570290	7188900
D25	2	323476	0	3843970	3841790	7685760

D26	2	316245	30642.7	3774720	3692610	7467330
D27	2	203488.0137	46626.1	3918610	4654530	8573140
D28	2	503586	8964.18	3436430	4926370	8362800
D29	2	552081	167781	4321380	3424770	7746150
D30	2	296181.1	33042.7	3839990	4696200	8536190
Mean		410843.3367	55477.52	3854995.714	3945165.714	7800161.429
St. Dev		121431.8145	51975.06149	412460.1394	523376.3862	538849.503
CV		3.383325354	1.067387289	9.346347309	7.537913093	14.47558434
Dose 2: 250 ug						
D31	3	521940	66184.7	4304440	3575980	7880420
D32	3	505884	61855.2	4413260	2915970	7329230
D34	3	353013.3	0	4164610	3922370	8086980
D35	3	634707	99916.8	4374440	5027210	9401650
D36	3	236249.6	0	3657770	3545710	7203480
D37	3	705244	18211.9	3640060	3844660	7484720
D38	3	641828	20290.9	4093770	4199010	8292780
D39	3	582915	32242.2	3849780	3302650	7152430
D40	3	684545.2	0	4522490	3546580	8069070
D41	3	677237	28182	3943440	3347020	7290460
D42	3	234021	31245.5	3278160	3456800	6734960
D43	3	393058	98461.6	4302810	4298230	8601040
D44	3	461905	161889	3901720	3158890	7060610
D45	3	740981	0	4250650	4380220	8630870
Mean		526680.5786	44177.12857	4049814.286	3751521.429	7801335.714
St. Dev		170102.8949	48296.66363	354692.9287	566781.9787	751315.3156
CV		3.096247003	0.914703527	11.41780385	6.618985023	10.38357072
Dose 3 500 ug						
D46	4	715301.4	35520.6	4004000	3760370	7764370
D47	4	541373.4	271570	3488510	4436410	7924920
D48	4	514363.4	65855.7	3827810	3674230	7502040
D49	4	421127.1	294648	5120520	3881680	9002200
D50	4	970230	148690	4388930	3417250	7806180

D51	4	460931	0	4519680	3747350	8267030
D52	4	372217	131213	4234490	4801800	9036290
D53	4	372690.1	0	4011030	4454680	8465710
D54	4	476556	56237.1	3279880	4080510	7360390
D55	4	501274	0	3916580	4774800	8691380
D56	4	481441	16482.7	3743300	4026210	7769510
D57	4	384293	104955	3844780	4749780	8594560
D58	4	274630.9	7017.41	3938390	3741560	7679950
Mean		498956.0231	87091.50077	4024453.846	4118971.538	8143425.385
St. Dev		176713.8674	100576.2422	468582.554	472007.1383	565827.3475
CV		1.816824047	12.4107756	1.021852545	1.100870102	1.06034875
AMEN Control						
A2	5	533106	841937	7552760	3659240	11212000
A3	5	168198	788171	8012910	1899670	9912580
A4	5	1160463.7	419180	5453620	3730370	9183990
A6	5	630407	990475	6183100	3509600	9692700
A7	5	942701	0	5159320	2416960	7576280
A8	5	1819300	242777.1	6185030	4733570	10918600
A9	5	1274680	749166	7054160	2840490	9894650
A10	5	1379240	178963.1	5530030	3835560	9365590
A11	5	1893513.333	168445	5680540	3549570	9230110
A12	5	1217820	756205.7	5749190	3364960	9114150
A13	5	1338070	613950	5842000	2775150	8617150
A14	5	1221370	944395	6357940	3725160	10083100
A15	5	1046620	232376.3	6264730	3112550	9377280
Mean		1125037.618	532772.4	6232717.692	3319450	9552167.692
St. Dev		480804.3333	338141.3279	844201.3296	719081.4527	933002.8946
CV		2.339907401	1.575590902	7.382975452	4.616236432	10.23809009
BL 65						
A16	6	1088140	134007	8633360	2404140	11037500
A17	6	847314	292468	6544410	2888790	9433200

A18	6	504672	669457	6300950	2680720	8981670
A19	6	912109	85827.8	5115620	2728220	7843840
A20	6	1054432	435601	9344990	2685010	12030000
A30	6	697672	406996	6823610	4021190	10844800
A31	6	563106	173233	5529280	6148120	11677400
A32	6	453696	413165	5690280	3547740	9238020
A34	6	481233	321545	5786450	3378970	9165420
Mean		733597.1111	325811.0889	6640994.444	3386988.889	10027983.33
St Dev		249557.2397	181369.3931	1442055.827	1156055.898	1414303.624
CV		2.939594588	1.796395099	4.605227011	2.929779516	7.090403479
Amen						
A21	7	1025860	362079	6229010	5580790	11809800
A22	7	1156270	508673	6488180	3906420	10394600
A23	7	643609	337627	6146240	3323400	9469640
A24	7	1189277	85176.8	5717000	4556500	10273500
A25	7	1020530	278675.4	5692020	4337280	10029300
A26	7	1161610	485249	5678270	4222540	9900810
A27	7	1211510	150348.5	6352260	3570240	9922500
A28	7	897599	1114791	6902660	2788540	9691200
Mean		1038283.125	415327.4625	6150705	4035713.75	10186418.75
St Dev		191969.6095	318391.3828	438795.1866	851934.0278	719247.0679
CV		5.408580701	1.304455726	14.01725723	4.737120033	14.16261422

Lame							
Animal	% Lamellar	% Non Lamellar	% Lamellar of Total	Cortical Area (r	% Endosteal	% Periosteal	% Medullary
Control							
D1	0.168402	0.831597827	8.172666744	3.91125	12.2148674	4.625349952	0.514693511
D2	0.185718	0.81428229	10.23078359	3.62918	15.1770372	3.394733797	0.449121811
D3	0.193275	0.806724502	10.34203055	4.13876	1.86384086	17.46370894	0.464907313
D4	0.293399	0.706601073	14.30836902	3.61214	25.6518297	3.688063032	0.512323744
D5	0.163872	0.836128218	7.865769453	4.17787	13.5161458	2.871032368	0.520004642
D6	0.203307	0.796693109	11.50945234	4.1852	17.2172656	3.113423492	0.433887741
D7	0.198252	0.801748498	8.711945825	3.47624	19.1435286	0.681621522	0.560560916
D8	0.136442	0.863557501	8.406216685	4.41529	12.0065273	1.637722551	0.383900415
D9	0.508732	0.49126788	23.99429443	3.65626	21.3364722	29.53673973	0.528351101
D10	0.376891	0.623108725	17.77838099	3.1106	28.168842	9.520285475	0.528288868
D11	0.356529	0.643471002	16.88138273	3.97113	25.663728	9.989171848	0.526507442
D12	0.157846	0.842153895	8.078811081	3.71787	15.7846105	0	0.488184326
D13	0.095344	0.904656193	4.824921189	4.04049	9.53438073	0	0.493944984
D14	0.198894	0.801106289	10.71001069	3.93821	19.8564729	0.032898195	0.461520897
Mean	0.231207	0.768792643	11.55821681	3.85574929	16.9382535	6.182482207	0.490442694
St. Dev	0.112842	0.112842184	5.067125839	0.3432383	7.10264845	8.321890746	0.047060052
CV	2.048944	6.812989767	2.281020282	11.2334471	2.38477993	0.742917973	10.42163522
Dose 1 125ug							
D16	0.147788	0.852212359	7.079005575	3.51263	14.3725926	0.406171444	0.521001516
D17	0.087755	0.912245014	4.224099694	3.87423	7.34360118	1.431897435	0.518648469
D18	0.116798	0.883201797	7.032642175	4.95553	9.54093709	2.138883227	0.397880962
D19	0.164396	0.83560399	8.360614872	3.89667	16.439601	0	0.491434441
D20	0.136299	0.863701267	6.706331267	3.27396	10.5994881	3.030385222	0.507968187
D22	0.143048	0.856952092	6.567934577	3.6466	12.6083749	1.696415839	0.540857697
D23	0.101678	0.89832185	5.307335489	4.05661	9.6241443	0.5436707	0.478025958
D24	0.162365	0.83763539	8.172796951	3.61861	12.6228193	3.613641702	0.496639263
D25	0.084152	0.915848459	4.208770505	3.84397	8.41515412	0	0.499858179

D26	0.091898	0.908102402	4.645404716	3.77472	8.37797241	0.811787364	0.494502051
D27	0.063827	0.936172747	2.917415483	3.91861	5.1928621	1.189863242	0.542920097
D28	0.149152	0.850848066	6.128930263	3.43643	14.654336	0.260857343	0.589081408
D29	0.166582	0.833418491	9.293158537	4.32138	12.7755717	3.882579176	0.442125443
D30	0.085736	0.914264412	3.856800282	3.83999	7.71306957	0.86048922	0.550151766
Mean	0.121534	0.87846631	6.035802885	3.85499571	10.7343232	1.419045851	0.505078246
St. Dev	0.035204	0.035204329	1.900644542	0.41246014	3.25029496	1.300034888	0.04709156
CV	3.452237	24.95336061	3.175661073	9.34634731	3.30256894	1.091544438	10.72545149
Dose 2: 250 ug							
D31	0.136632	0.863367895	7.463113641	4.30444	12.1256191	1.537591417	0.453780382
D32	0.128644	0.87135605	7.746232551	4.41326	11.4628189	1.401576159	0.397854891
D34	0.084765	0.915234968	4.365205553	4.16461	8.4765032	0	0.485022839
D35	0.167936	0.832064493	7.813775242	4.37444	14.5094458	2.284104937	0.534715715
D36	0.064588	0.935411576	3.279659276	3.65777	6.45884241	0	0.492221815
D37	0.198748	0.801251655	9.665771064	3.64006	19.3745158	0.500318676	0.513667846
D38	0.161738	0.838261822	7.984281508	4.09377	15.6781646	0.495653151	0.506345279
D39	0.15979	0.840209778	8.600674176	3.84978	15.1415146	0.837507598	0.46175216
D40	0.151365	0.848635331	8.483569978	4.52249	15.1364669	0	0.439527727
D41	0.178884	0.821115828	9.675918941	3.94344	17.173762	0.714655225	0.45909586
D42	0.080919	0.919080673	3.93864997	3.27816	7.13879127	0.953141396	0.513262143
D43	0.114232	0.885767766	5.714653112	4.30281	9.13491416	2.288309268	0.499733753
D44	0.159877	0.84012333	8.834845714	3.90172	11.8384969	4.14917011	0.447396188
D45	0.174322	0.82567819	8.585241117	4.25065	17.432181	0	0.507506196
Mean	0.140174	0.859825668	7.296542274	4.04981429	12.9344312	1.083001995	0.479420199
St. Dev	0.040518	0.040518138	2.110194595	0.35469293	4.05024526	1.183015191	0.037365092
CV	3.459545	21.22075982	3.457758016	11.4178038	3.19349332	0.915459077	12.83069752
Dose 3 500 ug							
D46	0.187518	0.812482018	9.670095578	4.004	17.8646703	0.887127872	0.484311026
D47	0.233035	0.766965438	10.25806443	3.48851	15.5187573	7.784698912	0.55980502
D48	0.15158	0.848420089	7.734150978	3.82781	13.4375374	1.720453732	0.489764117
D49	0.139786	0.860214373	7.951113061	5.12052	8.22430339	5.754259333	0.431192375
D50	0.254941	0.745058591	14.33377145	4.38893	22.1062993	3.387841684	0.437762132

D51	0.101983	0.898016895	5.575533172	4.51968	10.1983105	0	0.453288545
D52	0.118888	0.881112011	5.571202341	4.23449	8.79012585	3.09867304	0.531390648
D53	0.092916	0.907083692	4.402349006	4.01103	9.29163083	0	0.526202764
D54	0.162443	0.837557136	7.238653115	3.27988	14.5296779	1.714608461	0.554387743
D55	0.127988	0.872012317	5.767484565	3.91658	12.7987683	0	0.549371906
D56	0.133017	0.866982689	6.408688579	3.7433	12.8614057	0.440325381	0.518206425
D57	0.12725	0.872750066	5.692531089	3.84478	9.99518828	2.729805086	0.552649583
D58	0.071514	0.928486435	3.667319579	3.93839	6.97317686	0.178179662	0.487185463
Mean	0.146374	0.853626288	7.251612073	4.02445385	12.5069117	2.130459474	0.505809058
St. Dev	0.052748	0.05274823	2.853498892	0.46858255	4.28025899	2.41784071	0.045289905
CV	2.046796	0.919374001	1.977360281	1.02185255	1.79357443	11.95680499	1.038226908
AMEN Control							
A2	0.182058	0.817941653	12.26402961	7.55276	7.05842632	11.14740836	0.326368177
A3	0.119354	0.880646482	9.648033105	8.01291	2.0990876	9.836264229	0.191642337
A4	0.28965	0.710349511	17.19997191	5.45362	21.2787781	7.686270771	0.406181845
A6	0.262147	0.737852857	16.72270884	6.1831	10.1956462	16.0190681	0.362086931
A7	0.182718	0.817281929	12.44279514	5.15932	18.2718071	0	0.319016721
A8	0.333398	0.666601924	18.8859112	6.18503	29.4145703	3.925237226	0.433532687
A9	0.286901	0.713098937	20.45394228	7.05416	18.0699049	10.62020141	0.287073317
A10	0.281771	0.718228816	16.63753271	5.53003	24.9409135	3.236204867	0.409537466
A11	0.362986	0.637013676	22.33947736	5.68054	33.3333333	2.965299074	0.384564214
A12	0.343357	0.656642814	21.65891169	5.74919	21.1824622	13.15325637	0.369201736
A13	0.334136	0.66586443	22.65273321	5.842	22.9043136	10.50924341	0.322049634
A14	0.340639	0.659360579	21.4791582	6.35794	19.210153	14.85378912	0.369445905
A15	0.204158	0.795841752	13.63931012	6.26473	16.706546	3.709278772	0.331924609
Mean	0.271021	0.728978874	17.38650118	6.23271769	18.8204571	8.281655517	0.347125045
St. Dev	0.076589	0.076588825	4.325963974	0.84420133	8.59476997	5.085918546	0.062797482
CV	3.538651	9.518084064	4.019104479	7.38297545	2.18975693	1.62835001	5.527690528
BL 65							
A16	0.141561	0.858439009	11.0726795	8.63336	12.6038993	1.552199839	0.217815629
A17	0.174161	0.825838846	12.08266548	6.54441	12.9471411	4.468974285	0.306236484

A18	0.186342	0.813658417	13.07250211	6.30095	8.00945889	10.62469945	0.298465653
A19	0.195076	0.804923587	12.72255426	5.11562	17.8298818	1.67775949	0.347816886
A20	0.159447	0.840552745	12.38597672	9.34499	11.2833936	4.661331901	0.223192851
A30	0.161889	0.838110912	10.18615373	6.82361	10.2243827	5.964526109	0.370794298
A31	0.133171	0.866829135	6.305675921	5.52928	10.1840746	3.133011893	0.526497337
A32	0.152341	0.847659342	9.383623331	5.69028	7.97317531	7.260890501	0.384036839
A34	0.138734	0.861265888	8.758769374	5.78645	8.31654987	5.556861288	0.368665048
Mean	0.160302	0.839697542	10.66340005	6.64099444	11.0413286	4.988917195	0.338169003
St Dev	0.021502	0.021501529	2.226992178	1.44205583	3.15533876	2.845942426	0.093514312
CV	7.455398	39.05292246	4.788252133	4.60522701	3.49925299	1.752993015	3.616227254
Amen							
A21	0.222819	0.777181446	11.75243442	6.22901	16.4690697	5.812785659	0.472555843
A22	0.256612	0.743388285	16.01738403	6.48818	17.8211764	7.839995191	0.375812441
A23	0.159648	0.840351825	10.3619145	6.14624	10.4715891	5.49322838	0.350953151
A24	0.222924	0.777076474	12.4052543	5.717	20.8024663	1.489886304	0.443519735
A25	0.22825	0.771749678	12.95409849	5.69202	17.9291359	4.89589636	0.43246089
A26	0.290028	0.709971699	16.63357846	5.67827	20.4571111	8.545719031	0.426484298
A27	0.21439	0.785610397	13.72495339	6.35226	19.0721098	2.366850538	0.359812547
A28	0.291538	0.708461666	20.76512713	6.90266	13.0036682	16.1501653	0.287739392
Mean	0.235776	0.764223934	14.32684309	6.150705	17.0032908	6.574315845	0.393667287
St Dev	0.043309	0.043308558	3.336334585	0.43879519	3.60781388	4.556082682	0.060710938
CV	5.444099	17.64602599	4.294186546	14.0172572	4.71290686	1.442975535	6.484289334

Lame			
Animal	Peak Moment	Stiffness	BW
Control			
D1	288.1	10189.2	184.4
D2	304.3	8562.2	167.4
D3	292.3	5910.1	184.2
D4	294.1	9089.9	194.1
D5	299.5	6661.0	202.5
D6	272.5	8153.1	184.8
D7	324.5	9249.0	187.0
D8	276.5	8810.7	207.9
D9	271.3	7522.6	171.7
D10	240.6	7708.1	156.8
D11	243.3	6507.9	196.5
D12	258.5	5877.9	
D13	239.0	4380.7	155.1
D14	275.5	9029.4	191.5
Mean	277.1485857	7689.403	183.3769
St. Dev	25.52399887	1630.218	16.41814
CV	10.85835284	4.716794	11.16917
Dose 1 125ug			
D16	204.7	4919.6	199.4
D17	273.7	6898.5	219.8
D18	217.5	5149.3	216.4
D19	271.9	6921.6	207.2
D20	237.2	5496.4	243.4
D22	198.2	6300.4	200.0
D23	217.6	6099.2	217.1
D24	290.9	9911.5	180.3
D25	250.6	5921.0	209.8

D26	186.6	4639.6	201.5
D27	291.5	6951.8	226.9
D28	219.9	6477.3	247.2
D29	265.9	7561.3	237.1
D30	222.9	4416.4	244.4
Mean	239.2254857	6261.706	217.8929
St. Dev	34.77772668	1419.054	19.98578
CV	6.878698195	4.412593	10.90239
Dose 2: 250 ug			
D31	266.1	6980.2	222.9
D32	255.0	8596.6	209.4
D34	255.4	7615.6	198.6
D35	260.3	8557.4	245.5
D36	264.4	9611.5	210.1
D37	318.5	10189.1	193.6
D38	190.2	5195.3	198.1
D39	275.1	8640.4	206.1
D40	322.1	8856.9	252.9
D41	266.1	7703.3	200.3
D42	282.4	8456.2	216.1
D43	263.1	6906.0	253.1
D44	240.0	8251.0	209.0
D45	258.9	7522.4	213.8
Mean	265.52835	8077.279	216.3929
St. Dev	31.62245219	1238.937	20.11168
CV	8.396829834	6.519526	10.75956
Dose 3 500 ug			
D46	229.8	5885.1	204.5
D47	237.2	6039.4	199.9
D48	199.5	5797.6	214.8
D49	258.7	5510.7	235.1
D50	278.3	6866.0	233.4

D51	244.9	6975.7	233.7
D52	252.2	6337.0	212.9
D53	230.4	5463.8	218.5
D54	188.0	4426.1	182.8
D55	193.4	4569.9	205.4
D56	241.3	5709.3	215.3
D57	202.5	5665.4	199.2
D58	249.6	7509.8	222.5
Mean	231.2301846	5904.291	213.6885
St. Dev	27.69599418	879.2614	15.43819
CV	0.926573003	0.786214	0.960398
AMEN Control			
A2	835.44	35213.6	274.9
A3	664.18	50138.2	281.8
A4	646.12	41058.9	337.9
A6	588.15	48096.1	238.5
A7	604.08	52835.2	251.8
A8	658.55	45587.7	273.9
A9	605.29	53038.3	251.1
A10	636.88	52491.6	272
A11			
A12	630.43	54565.6	260.7
A13	606.74	48591.8	314.4
A14	563.98	43031.1	268.2
A15	733.08	55553.1	281.6
Mean	647.7433333	48350.1	275.5667
St. Dev	73.40884209	6140.292	27.46463
CV	8.823778102	7.874234	10.03351
BL 65			
A16	615.41	46734.3	256.9
A17	478.18	33672.1	218.5

A18	467.49	39533.4	235.3
A19	488.62	34440.5	259.8
A20	576.36	39493.8	261.4
A30	547.85	39086.9	287.1
A31	586.23	41740.7	234.5
A32	468.21	34235.3	228.5
A34	494.55	37602.5	236.6
Mean	524.7666667	38504.39	246.5111
St Dev	57.07219835	4175.629	21.30396
CV	9.194786285	9.22122	11.57114
Amen			
A21	673.81	44999.1	315.2
A22	712.38	49375.7	300.9
A23	629.85	38693.1	369.8
A24	633.85	43072.6	339.3
A25	605.63	51309.6	315
A26	629.85	47833.7	313.3
A27	700.63	50720.4	348.8
A28	643.00	49760.1	297.6
Mean	653.625	46970.54	324.9875
St Dev	37.80970548	4388.246	25.19203
CV	17.28722802	10.70372	12.90041