



Correction to: A multicenter retrospective study of the risk factors associated with medication-related osteonecrosis of the jaw after tooth extraction in patients receiving oral bisphosphonate therapy: can primary wound closure and a drug holiday really prevent MRONJ?

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In Table 2 (continued) of this article, the data (1874) in the [column 3/row 2] (page 2470, line 5) headed “Drug holiday before tooth extraction, 3-months, yes” were mistakenly listed. The correct expression is 1741. In Table 2 (continued) of this article, the data (543) in the [column 3/line 3] (page 2470, line 6) headed “Drug holiday before tooth extraction, 3-months, No” were mistakenly listed. The correct expression is 675.

The original article can be found online at <https://doi.org/10.1007/s00198-017-4063-7>.

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Table 2 Characteristics and incidence rates of MRONJ

Variables	MRONJ		P value
	Present n (%)	Absent n (%)	
Sample size	41 (1.7)	2417 (98.3)	
Stage 0	6 (14.6)	-	
Stage 1	16 (39.0)	-	
Stage 2	13 (31.7)	-	
Stage 3	6 (14.6)	-	
Sex			
Male	5 (12.2)	359 (14.9)	0.825 *
Female	36 (87.8)	2058 (85.1)	
Age			
Range (Years)	51–93	23–102	
Mean \pm SD	74.8 \pm 8.9	70.9 \pm 11.7	0.039 **
Smoking history			
Yes	1 (2.4)	102 (4.2)	1.000 *
No	30 (73.2)	1750 (72.4)	
Unknown	10 (24.4)	565 (23.4)	
The duration of oral BP administration			
Range (Months)	1–204	1–246	
Mean \pm SD	45.0 \pm 40.6	38.4 \pm 36.6	<0.001 **
More than 3 years	18 (43.9)	976 (40.4)	0.142 *
Less than 3 years	12 (29.3)	1150 (47.6)	
Unknown	11 (26.8)	291 (12.0)	
More than 4 years	12 (29.3)	653 (27.0)	0.319 *
Less than 4 years	18 (43.9)	1473 (60.9)	
Unknown	11 (26.8)	291 (12.0)	
Comorbidity (overlapping distribution)			
Osteoporosis			
Yes	33 (80.5)	1897 (78.5)	0.850 *
No	8 (19.5)	520 (21.5)	
Cancer			
Yes	3 (7.3)	164 (6.8)	0.756 *
No	38 (92.7)	2253 (93.2)	
Rheumatism			
Yes	3 (7.3)	226 (9.4)	1.000 *
No	38 (92.7)	2191 (90.6)	
Diabetes Mellitus			
Yes	9 (22.0)	354 (14.6)	0.185 *
No	32 (78.0)	2063 (85.6)	
Renal insufficiency including dialysis			
Yes	0 (0)	28 (1.2)	1.000 *
No	41 (100.0)	2388 (98.8)	
Drug-induced risk factor (overlapping distribution)			
Steroid therapy			
Yes	17 (41.5)	893 (36.9)	0.625 *
No	24 (58.5)	1524 (63.1)	
Immunosuppressive therapy			
Yes	3 (7.3)	194 (8.0)	1.000 *
No	38 (92.7)	2223 (92.0)	

Table 2 (continued)

Variables	MRONJ		P value	
	Present n (%)	Absent n (%)		
Drug holiday before tooth extraction				
3-months				
Yes	25 (61.0)	1741 (72.0)	0.118 *	
No	16 (39.0)	675 (27.9)		
Unknown	0 (0)	1 (0.0)		
2-months				
Yes	27 (65.9)	1791 (74.1)	0.280 *	
No	14 (34.1)	625 (25.9)		
Unknown	0 (0)	1 (0.0)		
Reason of tooth extraction				
Periapical periodontitis (per)	14 (34.1)	537 (22.2)	0.067 *	
Per + Radicular cyst	1 (2.4)	41 (1.7)		
P4 periodontitis	11 (26.8)	660 (27.3)		
C4 caries	12 (29.3)	873 (36.1)		
Pericoronitis	2 (4.9)	99 (4.1)		
Root fracture	1 (2.4)	180 (7.5)		
Per + root fracture	0 (0)	2 (0.1)		
C4 caries + root fracture	0 (0)	2 (0.1)		
Periapical periodontitis				
Yes	15 (36.6)	580 (24.0)		
No	26 (63.4)	1837 (76.0)		
P4 periodontitis				
Yes	11 (26.8)	661 (27.3)		1.000 *
No	30 (73.2)	1756 (72.7)		
Pericoronitis				
Yes	2 (4.9)	99 (4.1)	0.685 *	
No	39 (95.1)	2318 (95.9)		
Jawbone				
Mandibular	27 (65.8)	1191 (49.3)	0.040 *	
Maxillary	14 (34.2)	1226 (50.7)		
Site of tooth extraction				
Molar region	36 (87.8)	1555 (64.3)	0.001 *	
Anterior region	5 (12.2)	1226 (35.7)		
Bone volume around tooth				
Adequate alveolar bone volume	18 (43.9)	1447 (59.9)	0.053 *	
Bone loss or sever tooth mobility (Grade 3)	23 (56.1)	970 (40.1)		
Preoperative antibiotics administration				
Yes	15 (36.6)	869 (36.0)	1.000 *	
No	26 (63.4)	1548 (64.0)		
Number of teeth extracted				
Single	20 (48.8)	680 (28.1)	0.008 *	
Multiple	21 (51.2)	1737 (71.5)		
Additional surgical procedure				
Incision				
Yes	4 (9.8)	362 (15.0)	0.507 *	
No	37 (90.2)	2030 (84.0)		
Unknown	0 (0)	25 (1.0)		
Bone removal				
Yes	5 (12.2)	174 (7.2)	0.210 *	

Table 2 (continued)

Variables	MRONJ		P value
	Present n (%)	Absent n (%)	
No	36 (87.8)	2216 (91.7)	
Unknown	0 (0)	27 (1.1)	
Root amputation			
Yes	5 (12.2)	113 (4.7)	0.046 *
No	36 (87.8)	2278 (94.2)	
Unknown	0 (0)	26 (1.1)	
Wound state after extraction			
Open	23 (56.1)	832 (34.4)	0.012 ***
Closed with suture	18 (43.9)	1452 (60.1)	
Completely closed with relaxation incision or removal of bone edge	0 (0)	105 (4.3)	
Unknown	0 (0)	28 (1.2)	

*: Fisher's exact test, **: Mann–Whitney U test, ***: Chi-squared test

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