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ERRATUM

Investigations on mechanical behaviour of dental composites

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The presentation of Table 2 was incorrect.

Under "Material type" the data in the columns 'CS', 'Vol%', and Wt%, were interchanged.

The correct version is given below.

Table 2 Flexural strength (FS) and modulus (FM), diametral tensile strength (DTS) and compressive strength (CS)

Composites	FS [MPa]	FM [GPa]	DTS [MPa]	CS [MPa]
Hybrid composites				
Z250	160.8^{i} (22.2)	10.3^{lm} (0.6)	33.1^{abcde} (3.6)	282.9^{k} (25.6)
Synergy Duo Shade	143.5^{hi} (16.3)	8.7^{hijkl} (0.6)	28.2^{abc} (3.7)	272.5^{jk} (27.8)
Ecusit Composite	140.7^{ghi} (15.5)	9.6^{ijkl} (0.5)	30.3^{abc} (5.1)	263.5^{hijk} (19.5)
Tetric	139.9^{ghi} (15.0)	9.9^{jklm} (0.7)	30.6^{abcd} (3.9)	261.2^{hijk} (27.8)
TPH Spectrum	138.6^{ghi} (15.6)	8.8^{hijkl} (0.3)	42.1^{def} (6.9)	261.2^{hijk} (28.0)
Enamel plus HFO	138.4^{ghi} (10.2)	8.5^{ghijk} (1.7)	33.2^{abcde} (4.0)	199.1^{efghi} (44.9)
Adamant Cavifil	135.9^{fghi} (18.0)	7.7^{efgh} (1.2)	47.7^{f} (15.9)	206.1^{efghij} (58.7)
Z100	134.5^{fghi} (18.0)	11.3^{m} (0.5)	33.5^{abcde} (4.8)	256.6^{hijk} (36.2)
Prodigy	126.6^{efgh} (20.9)	7.8^{fgh} (0.3)	38.5^{bcdef} (5.5)	253.6^{hijk} (26.9)
Arabesk Top	123.1^{defgh} (23.3)	8.1^{fghi} (0.6)	26.9^{ab} (4.7)	248.8^{ghijk} (48.4)
Herculite XRV	121.8^{cdefgh} (12.4)	8.5^{ghij} (0.6)	31.8^{abcd} (2.3)	251.4^{hijk} (33.0)
Ariston pHc	119.3^{bcdefgh} (11.1)	7.3^{efgh} (0.9)	44.2^{ef} (5.6)	179.3^{cdefg} (62.0)
Brillant	119.2^{bcdefgh} (13.9)	7.7^{efgh} (0.6)	31.0^{abcd} (3.7)	218.0^{fghijk} (33.9)
Pertac II	117.5^{bcdefgh} (12.6)	8.7^{hijkl} (0.3)	30.4^{abcd} (3.3)	242.2^{ghijk} (38.0)
Tetric Ceram	116.9^{bcdefgh} (9.2)	8.1^{fghi} (0.4)	39.2^{cdef} (3.7)	248.0^{ghijk} (24.8)
Superlux Universalhybrid	113.9^{bcdefg} (9.2)	6.9^{efg} (0.7)	32.0^{abcd} (7.8)	267.7^{ijk} (53.4)
EcuSphere Carat	112.8^{bcdefg} (17.6)	6.6^{def} (0.8)	34.7^{bcde} (4.4)	252.3^{hijk} (27.6)
Venus	108.6^{bcdef} (14.7)	2.9^{a} (0.6)	31.0^{abcd} (5.0)	156.8^{bcdef} (35.6)
Hermes	108.5^{bcdef} (24.0)	7.5^{efgh} (1.4)	31.6^{abcd} (7.2)	129.1^{abcd} (43.3)

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Table 2 (continued)

Composites	FS [MPa]	FM [GPa]	DTS [MPa]	CS [MPa]
Esthet-X	106.8^{bcdef} (13.6)	7.8^{fgh} (0.6)	29.3^{abc} (3.7)	272.4^{jk} (13.2)
Point 4	104.2^{bcde} (14.0)	5.7^{cd} (1.5)	27.0^{ab} (11.5)	150.2^{bcdef} (35.2)
Reference	102.7^{abcde} (8.5)	10.1^{klm} (1.8)	37.5^{bcdef} (6.7)	284.4^{k} (35.0)
Charisma	102.4^{abcde} (11.1)	7.1^{efg} (0.5)	27.3^{ab} (3.0)	263.3^{hijk} (15.3)
Beautifil	98.4^{abcde} (16.6)	5.2^{cd} (1.0)	29.0^{abc} (7.9)	121.6^{abc} (27.1)
Clearfil ST	97.5^{abcde} (16.8)	6.1^{cde} (1.0)	27.6^{abc} (5.0)	150.8^{bcdef} (45.1)
Miris	94.9^{abcd} (16.6)	4.7^{bc} (1.2)	22.4^{a} (7.9)	70.8^{a} (23.5)
InTenS	93.1^{abc} (9.8)	4.8^{bc} (0.5)	35.9^{bcdef} (6.3)	195.3^{defgh} (37.6)
CapoCom.4	91.8^{ab} (19.0)	3.4^{ab} (0.8)	30.3^{abc} (4.9)	100.4^{ab}(17.5)
ELS Extra low shrinkage	73.6^{a} (19.0)	2.4^{a} (0.8)	26.9^{ab} (6.5)	138.3^{abcde} (56.6)
Nano-hybrid composites				
Filtek Supreme Enamel	125.5^{d} (13.1)	5.4^{bc} (0.6)	39.2^{abc} (8.3)	267.4^{b} (38.3)
Filtek Supreme Dentin	122.1^{cd} (14.4)	5.2^{ab} (0.5)	41.8^{abc} (7.8)	103.7^{a} (20.9)
Filtek Supreme XT	108.6^{bcd} (19.0)	6.1^{c} (1.1)	35.8^{ab} (7.6)	134.3^{a} (46.7)
CeramX Duo	100.9^{abc} (17.9)	4.5^{ab} (0.5)	32.0^{a} (4.9)	214.9^{b} (25.6)
Tetric Evo Ceram	96.0^{ab} (14.3)	5.3^{bc} (0.5)	38.5^{abc} (5.2)	219.7^{b} (46.9)
CeramX Mono	95.0^{ab} (13.3)	4.3^{a} (0.4)	39.6^{abc} (7.9)	240.7^{b} (25.8)
Premise Enamel	82.2^{a} (8.1)	5.0^{ab} (0.5)	45.1^{bc} (4.5)	242.8^{b} (36.1)
Micro-filled composites				
Heliomolar radiopaque	87.6^{c} (3.0)	4.1^{b} (0.2)	25.1^{ab} (2.4)	231.3^{a} (22.9)
Durafill	76.4^{b} (9.2)	3.0^{a} (0.2)	21.5^{a} (2.4)	289.8^{b} (33.1)
EcuSphere Shine	68.4^{a} (6.1)	3.3^{a} (0.3)	27.2^{b} (4.5)	219.2^{a} (22.2)
Silux Plus	62.8^{a} (3.4)	5.0^{c} (0.3)	22.4^{a} (2.1)	254.3^{ab} (30.4)
Packable composites				
Filtek P60	136.2^{d} (9.9)	10.2^{c} (0.5)	37.3^{cd} (6.4)	273.7^{c} (43.8)
Alert	124.7^{cd} (22.1)	12.5^{d} (2.1)	46.8^{e} (3.1)	275.6^{c} (22.9)
Synergy Compact	124.1^{cd} (11.8)	8.2^{bc} (0.6)	22.9^{a} (4.5)	195.4^{ab} (34.8)
Surefil	110.5^{bcd} (24.3)	7.4^{b} (2.0)	31.9^{bc} (7.8)	180.9^{a} (82.2)
Prodigy Condensable	102.4^{bc} (32.3)	9.1^{bc} (1.4)	32.2^{bc} (5.7)	141.5^{a} (25.7)
Solitaire 2	100.2^{bc} (9.4)	7.7^{b} (0.5)	32.0^{bc} (2.9)	285.0^{c} (26.7)
Quix Fil	99.5^{bc} (29.4)	7.6^{b} (1.2)	42.7^{de} (7.8)	212.7^{abc} (30.3)
Solitaire 1	82.3^{ab} (9.9)	4.3^{a} (0.3)	26.4^{ab} (2.3)	257.2^{bc} (25.6)
Tetric Condensable	65.4^{a} (17.3)	8.7^{bc} (2.0)	38.9^{cde} (4.7)	171.0^{a} (39.7)
Ormocer-based composites				
Definite	120.5 (3.2)	7.1 (0.6)	26.9 (3.5)	223.7 (32.2)
Admira	88.2 (19.7)	7.9 (3.5)	43.4 (5.2)	208.4 (31.0)
Compomeres				
Luxat	131.6^{d} (24.2)	12.4^{d} (0.6)	48.9^{d} (5.4)	256.6^{b} (19.4)
Hytac	123.5^{cd} (16.7)	11.7^{d} (0.7)	45.2^{d} (5.4)	227.7^{b} (14.5)
Compoglass F	104.0^{bcd} (21.7)	8.8^{bc} (0.6)	29.7^{abc} (3.3)	201.4^{a} (48.3)
Dyract	101.0^{bc} (22.9)	7.3^{a} (0.8)	33.1^{bc} (4.1)	247.8^{ab} (22.7)
Glasiosite	100.1^{bc} (15.5)	9.0^{c} (0.5)	36.4^{c} (5.7)	237.6^{ab} (32.6)
Dyract AP	84.9^{b} (16.0)	7.7^{ab} (0.6)	25.4^{a} (2.2)	201.5^{a} (19.4)
Elan	81.5^{b} (18.2)	7.9^{abc} (1.0)	25.5^{a} (4.1)	256.4^{ab} (45.2)
F2000 Rasant	31.0^{a} (9.5)	8.4^{bc} (0.8)	26.8^{ab} (2.8)	218.5^{ab} (15.4)

Table 2 (continued)

Composites	FS [MPa]	FM [GPa]	DTS [MPa]	CS [MPa]		
Flowable composites						
FLOWline	133.0^{g} (13.9)	5.1^{bcde} (0.4)	53.6^{d} (6.5)	286.3^{bc} (29.4)		
Arabesk Flow	131.7^{g} (22.0)	6.4^{e} (0.7)	38.4^{abc} (7.0)	266.8^{bc} (36.0)		
Tetric Flow	114.7^{efg} (13.1)	4.8^{bcd} (1.4)	38.6^{abc} (4.9)	257.3^{abc} (48.6)		
Palfique Estelite Low Flow	105.1^{def} (15.3)	2.3^{a} (0.3)	35.8^{abc} (12.0)	239.2^{abc} (60.7)		
Reference Flow	103.8^{cdef} (10.1)	5.8^{de} (0.3)	40.1^{bc} (9.1)	299.0^{c} (23.0)		
Revolution	92.0^{bcde} (5.0)	4.0^{b} (0.4)	28.4^{ab} (6.0)	253.9^{abc} (14.3		
Grandio Flow	85.2^{abcd} (23.1)	4.1^{b} (0.6)	44.6^{cd} (4.4)	233.1^{ab} (16.3)		
Definite Flow	81.7^{abcd} (31.4)	4.3^{bc} (0.7)	33.4^{abc} (9.1)	250.3^{abc} (49.3)		
Palfique Estelite High Flow	69.3^{ab} (10.3)	1.6^{a} (0.4)	38.7^{abc} (12.1)	285.5^{bc} (42.9)		
Admira Flow	62.8^{a} (11.0)	5.4^{cde} (1.4)	31.2^{ab} (7.2)	277.3^{bc} (19.2)		
Flowable compomeres						
Compoglass Flow	120.4^{fg} (10.0)	5.5^{cde} (0.3)	39.6^{bc} (7.2)	262.2^{bc} (38.4)		
PrimaFlow	95.7^{bcdef} (11.8)	4.5^{bc} (0.2)	38.9^{abc} (7.2)	195.1^{a} (10.5)		
Estelite Flow Quick	77.5^{abc} (16.0)	2.5^{a} (0.3)	26.8^{a} (5.0)	261.7^{bc} (45.2)		
Dyract Flow	62.9^{a} (14.7)	4.3^{bc} (0.3)	28.7^{ab} (4.7)	232.2^{ab} (29.9)		
Material type					Vol. %	Wt. %
Hybrid Composites	116.6^{d} (23.9)	7.3^{b} (2.3)	32.5^{b} (8.0)	211.5^{a} (71.1)	60.5^{de} (5.7)	79.0^{ef} (3.2)
Packable Composites	105.9^{cd} (28.1)	8.4^{bc} (2.5)	34.3^{bc} (8.8)	217.4^{a} (66.5)	63.0^{c} (3.2)	80.3^{f} (3.5)
Ormocer-based Composites	104.3^{bcd} (21.6)	7.5^{b} (2.4)	35.2^{bc} (9.5)	216.0^{a} (31.5)	60.6^{de} (0.4)	77.0^{d} (0)
Nano-hybrid Composites	103.1^{bcd} (19)	5.0^{a} (0.8)	40.5^{d} (8.3)	210.8^{a} (63.3)	59.7^{d} (3.9)	78.4^{de} (2.5)
Compomers	94.7^{bc} (34)	9.2^{c} (1.9)	33.9^{bc} (9.4)	230.9^{ab} (35.3)	56.0^{c} (6.8)	74.9^{c} (5.6)
Flowable Compomers	89.1^{ab} (25.2)	4.2^{a} (1.1)	33.5^{bc} (8.3)	237.8^{ab} (42.4)	43.3^{a} (4.3)	64.4^{b} (4.1)
Flowable Composites	99.8^{bc} (27.4)	4.4^{a} (1.6)	38.3^{cd} (10)	264.2^{b} (41.5)	48.4^{b} (6.5)	66.1^{b} (4.3)
Microfilled Composites	73.5^{a} (10.9)	3.8^{a} (0.8)	24.2^{a} (3.8)	246.9^{ab} (37.8)	42.7^{a} (3.0)	60.7^{a} (4.0)

Data are arranged in descending order of the flexural strength value

Superscript letters indicate statistically homogeneous subgroups within a material category (Tukey's HSD test, α=0.05)