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CORRIGENDUM OF THE PAPER: SOME RESULTS ON CERTAIN CLASSES OF MULTIVALENTLY ANALYTIC FUNCTIONS BASED ON DIFFERENTIAL SUBORDINATION INVOLVING A CONVOLUTION STRUCTURE MATH. SLOVACA 60 (2010), 471–484 (SUBORDINATION RESULT AND GENERALIZATIONS)

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(*Communicated by Michal Fečkan*)

ABSTRACT. This note gives the correct form of a result (Theorem 2, p. 478) published recently in [Math. Slovaca **60** (2010), 471–484].

In a recently published paper, the following result (see [Math. Slovaca **60** (2010), 471–484: Theorem 2, p. 478]) which we state as:

Theorem A. *If* $f(z) \in \mathcal{J}_p^{m,1}(g;\alpha,A,0)$, *then*

$$\left|\frac{z\,(f*g)^{(m+1)}(z)}{(f*g)^{(m)}(z)} - (p-m)\right| < \frac{(p-m)(2\alpha+p-m)A}{\alpha(\alpha+p-m+\alpha A)}.$$

has an incorrect expression on the right-hand side of the inequality. In the proof of this theorem, the inequality (3.10) stated on page 478 has not correctly been applied in the inequality below (3.11) on page 479. In fact, the α in numerator of right hand side of (3.10) need to be replaced by $(p-m)$, and an equivalent expression stemming from (3.10) which involves the inequality sign

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"$>$" (deduced appropriately) needs to be used in the aforementioned step. With this modification, Theorem A above (along with the precise conditions imposed) has the following corrected statement.

Theorem B. *If* $f(z) \in \mathcal{J}_p^{m,1}(g;\alpha,A,0)$, *then*

$$\left|\frac{z\,(f*g)^{(m+1)}(z)}{(f*g)^{(m)}(z)} - (p-m)\right| < \frac{(p-m)[\alpha+2(p-m)]A}{\alpha[\alpha+(p-m)(1-A)]},$$

where $\alpha > 0$, $p > m$ $(m \in \mathbb{N}_0 = \mathbb{N} \cup \{0\})$, $0 < A < 1$ *and* $z \in \mathbb{U}$.

REFERENCES

[1] PRAJAPAT, J. K.—RAINA, R. K.: *Some results on certain classes of multivalently analytic functions based on differential subordination involving a convolution structure*, Math. Slovaca **60** (2010), 471–484.

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