## **Supporting Information**

## J. Chem. Metrol. 15:1 (2021) 65-75

## Simultaneous quantification of teneligliptin hydrobromide and metformin hydrochloride: An improved HPTLC method with implementation of Plackett-Burman design

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| Sr. |           | MH                 |      |           | TH                  |      |
|-----|-----------|--------------------|------|-----------|---------------------|------|
| No. | Conc.     | Peak area          | %RSD | Conc.     | Peak area           | %RSD |
|     | (ng/band) | (Mean±SD)          |      | (ng/band) | (Mean±SD)           |      |
| 1   | 100       | $884.80{\pm}07.60$ | 0.80 | 4         | $1811.50 \pm 20.34$ | 1.12 |
| 2   | 200       | 1519.70±16.84      | 1.10 | 8         | $1825.70 \pm 19.52$ | 1.06 |
| 3   | 300       | 2201.00±23.48      | 1.06 | 12        | $1836.00 \pm 20.52$ | 1.11 |
| 4   | 400       | 2920.80±29.68      | 1.01 | 16        | $1847.00 \pm 22.05$ | 1.19 |
| 5   | 500       | 3312.70±34.23      | 1.03 | 20        | 1859.10±23.69       | 1.27 |
| 6   | 600       | 3869.10±43.61      | 1.12 | 24        | $1865.91 \pm 20.42$ | 1.09 |
| 7   | 700       | $4862.40\pm 56.84$ | 1.16 | 28        | $1875.60{\pm}20.88$ | 1.11 |
|     |           |                    |      |           |                     |      |

**Table S1.** Nominal values and peak areas in linearity experiment of TH and MH (n=6)



Figure S1: Overlay linearity chromatogram of TH and MH 4-28 ng/band and 100-700 ng/band, respectively



Figure S2: Calibration curve (a) Metformin (100-700 ng/band) and (b) Telenigliptin (4-28 ng/band)