## Electronic supplementary file

# Efficient dispersive solid-phase extraction of methylprednisolone from exhaled breath of COVID-19 patients 

Yasaman Sefid-Sefidehkhan ${ }^{\text {a }}$, Mehdi Mokhtari ${ }^{\text {b }}$, Ata Mahmoodpoor ${ }^{\text {c }}$, Yosra Vaez-Gharamaleki<br>${ }^{\text {d }}$, Maryam Khoubnasabjafari ${ }^{\text {e }}$, Mohamad Reza Afshar Moghaddam ${ }^{\mathrm{f}}$, Vahid JouybanGharamaleki ${ }^{\mathrm{g}}$, Siavoush Dastmalchi ${ }^{\mathrm{h}}$, Elaheh Rahimpour ${ }^{\mathrm{a}, \mathrm{i}, 1}$, Abolghasem Jouyban ${ }^{\mathrm{a}, \mathrm{j}}$<br>${ }^{a}$ Pharmaceutical Analysis Research Center and Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{b}$ Immunology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{c}$ Department of Anesthesiology and Intensive Care, Faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{d}$ Hematology - Oncology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{\mathrm{e}}$ Tuberculosis and Lung Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{\mathrm{f}}$ Food and Drug Safety Research Center, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{\mathrm{g}}$ Kimia Idea Pardaz Azarbayjan (KIPA) Science Based Company, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{h}$ Biotechnology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran<br>${ }^{i}$ Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, Tabriz, Iran ${ }^{j}$ Pharmaceutical Sciences Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran

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Fig. 1S. The effect of mobile phase on the methylprednisolone chromatogram
Table 1S: The peaks properties such as asymmetry coefficient, retention factor and column efficiency for investigated mobile phases.

| Mobile phase composition | Asymmetry <br> Coefficient | Retention Factor | Column Efficiency |
| :--- | :---: | :---: | :---: |
| $30: 70: 2 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}$-acetic acid | Multi-branched <br> peaks | Multi-branched <br> peaks | Multi-branched <br> peaks |
| $50: 50 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}$ | 3.5 | 2 | 101 |
| $35: 65: 2 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}$-acetic acid | 1 | 3.1 | 28.7 |
| $40: 60: 2 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}-$ acetic acid | 3 | 2.8 | 24.7 |
| $30: 70: 5 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}$-acetic acid | 2 | 2.6 | 112.2 |
| $50: 50: 2 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}-$ acetic acid | 2.3 | 2.6 | 11.5 |
| $45: 54.98: 0.02 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}-\mathrm{THF}$ | 0.8 | 2.8 | 163.3 |
| $45: 54.96: 0.04 \mathrm{v} / \mathrm{v}$ of acetonitrile- $\mathrm{H}_{2} \mathrm{O}-\mathrm{THF}$ | 2.75 | 2.5 | 128.5 |


[^0]:    ${ }^{1}$ Corresponding author. E-mail: rahimpour_e@yahoo.com

