**[A Comprehensive Review on Analytical Method Development and Validation for SGLT-2 Inhibitors by HPLC in Its API and Dosage Form](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)**

Author(s): [Manojkumar K. Munde](https://rjptonline.org/search.aspx?key=Manojkumar%20K.%20Munde), [Nilesh S. Kulkarni](https://rjptonline.org/search.aspx?key=Nilesh%20S.%20Kulkarni), [Nikita B. Rukhe](https://rjptonline.org/search.aspx?key=Nikita%20B.%20Rukhe), [Dhanya B. Sen](https://rjptonline.org/search.aspx?key=Dhanya%20B.%20Sen)

**ABSTRACT:**
SGLT-2 is the newly developed class of antidiabetic medicine also called as gliflozins. Empagliflozin, dapagliflozin and canagliflozin are the SGLT-2 class inhibitors for the treatment of type II diabetes mellitus. SGLT-2 inhibitors shows the 82% of plasma protein binding, 36.8% of partitioning of red blood cells, 78% of bioavailability, 5.6 to 13.1 hrs half life in oral route of administration. In this review we complied analytical methods for the development and determination of the SGLT-2 inhibitors. Table no. 1, 2, 3 shows the analytical method development and validation of empagliflozin dapagliflozin and canagliflozin alone and with its combination by the HPLC method respectively also table no. 4 shows the various formulations available in SGLT-2 Inhibitors.

*Keywords:*

* [Empagliflozin](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)
* [dapagliflozin](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)
* [canagliflozin](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)
* [pharmacokinetic parameters](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)
* [pharmacodynamic parameters](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)
* [HPLC method.](https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76)

DOI: [10.5958/0974-360X.2020.00616.2](https://doi.org/10.5958/0974-360X.2020.00616.2)

FULL TEXT : <https://rjptonline.org/AbstractView.aspx?PID=2020-13-7-76>