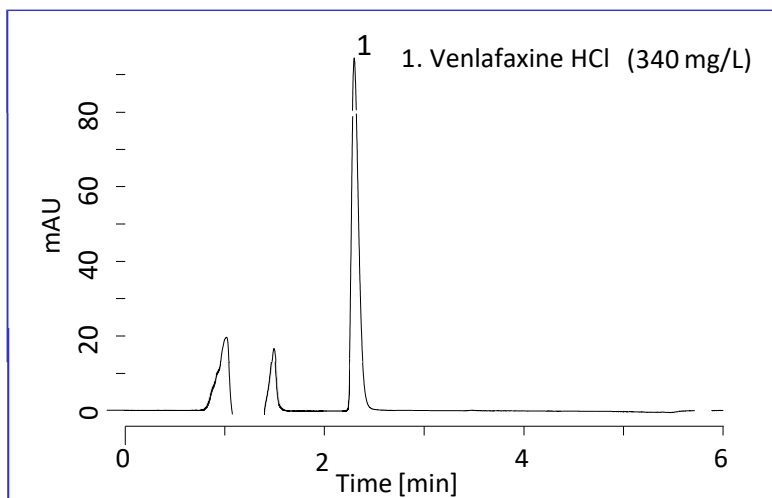


Venlafaxine is a type of serotonin and norepinephrine reuptake inhibitors (SNRIs). SNRIs increase the levels of serotonin and norepinephrine, which are known to play an important role in mood, in the brain.

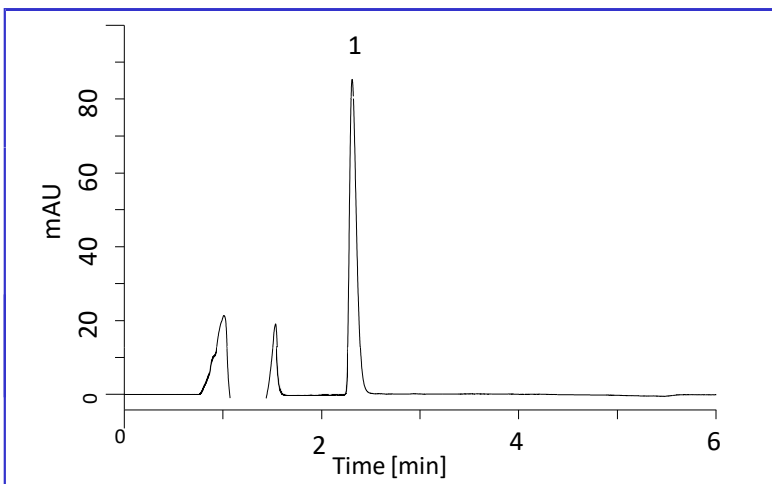
In this note, venlafaxine was analyzed under an condition based on United States Pharmacopeia (USP). The peak shape obtained with InertSustain C18 was excellent although conventional ODS columns provides asymmetric peaks for some of antidepressant drugs.

Standard Solution

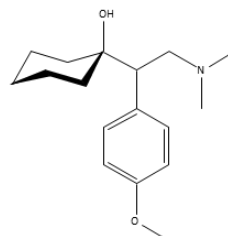


Tablet Sample

The sample concentration was adjusted to 300 mg/L as venlafaxine hydrochloride.:



Chemical Structure



Structures are created using Chemistry 4-D Draw which is provided by ChemInnovation Software, Inc.

Conditions

Column	: InertSustain C18 HP (3 μ m, 100 x 4.6 mm I.D.)
Column Cat. No. :	5020-14444
Eluent	: A) CH ₃ CN B) Buffer* A/B = 30/70, v/v
Flow rate	: 1.0 mL/min
Column temp.	: 25 °C
Detection	: UV 275 nm
Injection vol.	: 10 μ L

* Buffer: 3.4 g of potassium dihydrogenphosphate was dissolved in 700 mL of purified water. To this solution, 5 mL of triethylamine was added. The pH value was adjusted to 3.0 by adding phosphoric acid.

An Example of Pretreatment Method for Tablet Sample

Sample

- Grind tablet into powder
- Weigh the powder equivalent to 100 mg of venlafaxine HCl.

Extraction

- Add 80 mL of diluent** Sonication extraction for 30 min Make up to 100 mL with diluent

Filtration

- 0.45 μ m membrane filter

Dilution

- Adjust the concentration of venlafaxine HCl to 300 mg/L by adding diluent

HPLC

- ** Diluent : Methanol / 0.1 N HCl = 4/1, v/v

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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