The diploma thesis of Blerina Shkodra is aimed to convert the conventional HPLC method for the analysis of quetiapine and its related substances to ultra-fast liquid chromatography. The text is divided into 6 basic parts (Introduction, Aim, Theoretical part, Experimental part, Results and conclusion part and references). The author refers to 40 literary references.

The quality of the thesis would certainly benefit from better editing. The text is not formatted, double space and different fonts are used. The references to the figures are missing within the whole text, the figures are of poor quality and the legends to the figures are hardly readable. The tables do not have captions and are not cited in the text. The references are not uniform.

The text is unusually arranged because “The experimental part” contains mixture of methods and results and “The Result and conclusion part” only summarized the results obtained in the work.

The specific comments:
Page 19. The term “normal phase” is mentioned in the text but it is not explained.
Page 21: What is the source of Figure? There is no reference and some parts of HPLC instrument presented here are not common hardware (especially guard column placed before the flow splitting valve and equilibration coil).
Page 20: Is a strip-chart recorder standard accessories of modern HPLC instrument?
Page 21 and 22: The information about the stationary phase particle size is duplicated in the sections 3.2.3 and 3.2.4.
Page 23 – The symbol for retention factor is not given uniformly (k versus -k’). What is correct?
Pages 23, 26 - The symbols used in the formulas are not defined.
Page 24- How can be dead volume measure?
Page 30 – Chapter “Solvents and sample preparation” is not well written; e.g. 2nd paragraph doesn’t make sense.
Page 35-36 – Description of internal and external standard calibrations is not correct.
Page 38 – The reference on a validation guideline is missing.
Page 41- The following statement “The decrease of particle size is explained by the van Deemter equation….” is not clear.
Page 44- The chemical formula (or at least the chemical name) of the impurities should be given in experimental part.
There are no retention times corresponding to the analyzed compounds within whole experimental part that makes the orientation in chromatograms very difficult.
Page 46 - Tailing factor for Quetiapine is not within the Ph.Eur. and USP limits.
Page 46 - Is statement “…tailing factor of the peak areas… and …resolution of the peak areas…” correct?
Page 49 – Figure 4.1. - Description of axis is missing.
Page 51 - Are LOQ and LOD (0.0002 mg/ml and 0.00005 mg/ml, respectively) correct? They seem to be very low for UV detection.
Page 52- 53 How did you determine precision? There are contradictory data on it.