clinical and preclinical) and skills needed to perform adequately during the following 18 month internship that is required to obtain the medical license. CP contents, results, and student perceptions from the first 3 occasions are presented.

Patients (or Materials) and Methods: The examination takes place in the last semester of the 5.5-year training program. The 6 stations are equally weighted in the total result. The students can pass the exam if they fail at 1 station, as long as their average score is sufficient. The CP station has consisted of a computer-presented patient case with questions, aimed at assessing prescribing skills and has also included preclinical aspects. Students have been allowed to use the Internet to search for information but not to interact with other persons. The cases so far have included the evaluation of possible side effects in an elderly patient with polypharmacy admitted after falling, drug prescribing to a pregnant woman with a urinary tract infection and migraine, and the reasoning about terminating or continuing treating.
OC011—PATENTED DRUG EXTENSION STRATEGIES ON HEALTH CARE SPENDING: A COST-EVALUATION ANALYSIS

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Introduction: Drug manufacturers developed “evergreening strategies” to compete with generic medication after patent termination. These include marketing of slightly modified follow-on drugs. We identified 8 follow-on drugs available in the canton of Geneva during the study period: 3 drugs for which an isomer had been marketed (levocetirizine as follow-on drug of cetirizine; escitalopram/citalopram; esomeprazole/omeprazole); 1 active metabolite (desloratidine – loratidine); 2 combination formulations of the originally patented pram; esomeprazole/omeprazole); 1 structural analogue (simvastatin alone – simvastatin with ezetimib); 1 slow-release formulation (zolpidem extended release); and 1 combination formulation (zolpidem extended release and dried plasma sampling (DPS) using only 5 μL of whole blood or plasma for therapeutic monitoring of Bu levels.

Patients (or Materials) and Methods: Venous blood samples were collected from 2 children after the infusion of Bu at doses 1, 2, 3, 5, and 9 (n = 34). Then, 5 μL each of whole blood and plasma were spotted onto Whatman 903 DBS cards and dried at room temperature for 30 minutes. The entire spots were cut and then analyzed by a validated LC-MS/MS method. Bu was also measured by established gas chromatography coupled to mass spectrometry (GC-MS) method using plasma (n = 13) to compare both the methods.

Results: A good correlation was observed between the levels measured by DBS and DPD (r = 0.95; slope = 0.84). The Bu levels measured by DPD (r = 0.92; slope = 0.95) and DPD (r = 0.91; slope = 0.80) were correlated with those measured by GC-MS method. The levels estimated by DPD were less than those obtained by DPD and GC-MS methods. The hematocrit (Hct) values of 2 children were in the range of 25.6% to 30.3%, indicating the direct influence of Hct on the measured Bu levels measured by DBS sampling. Therefore, these 2 sampling methods can be used interchangeably with due consideration of the Hct value when whole blood sample is used. The plasma levels can be obtained from DBS levels using the formula “Plasma levels (analyte) = DBS levels analyte (1 – hematocrit).” The plasma levels of Bu estimated using this formula were higher than

OC013—A SIMPLIFIED METHOD FOR BUSULFAN THERAPEUTIC DRUG MONITORING USING DRIED BLOOD SPOT SAMPLING IN PEDIATRIC PATIENT UNDERGOING STEM CELL TRANSPLANTATION

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Introduction: Intravenously administered Busulfan (Bu) in children undergoing hematopoietic stem cell transplantation (HSCT) exhibits therapeutic window phenomenon requiring therapeutic drug monitoring. The dosage of Bu is adjusted based on the first dose pharmacokinetic parameters. Existing methods for the analysis of Bu require long turnaround times with relatively large amounts of blood collection for plasma separation.

Objective: To evaluate the utility of dried blood sampling (DBS) and dried plasma sampling (DPS) using only 5 μL of whole blood or plasma for therapeutic monitoring of Bu levels.

Patients (or Materials) and Methods: Venous blood samples were collected from 2 children after the infusion of Bu at doses 1, 2, 3, 5, and 9 (n = 34). Then, 5 μL each of whole blood and plasma were spotted onto Whatman 903 DBS cards and dried at room temperature for 30 minutes. The entire spots were cut and then analyzed by a validated LC-MS/MS method. Bu was also measured by established gas chromatography coupled to mass spectrometry (GC-MS) method using plasma (n = 13) to compare both the methods.

Results: A good correlation was observed between the levels measured by DBS and DPD (r = 0.95; slope = 0.84). The Bu levels measured by DPD (r = 0.92; slope = 0.95) and DPD (r = 0.91; slope = 0.80) were correlated with those measured by GC-MS method. The levels estimated by DPD were less than those obtained by DPD and GC-MS methods. The hematocrit (Hct) values of 2 children were in the range of 25.6% to 30.3%, indicating the direct influence of Hct on the measured Bu levels measured by DBS sampling. Therefore, these 2 sampling methods can be used interchangeably with due consideration of the Hct value when whole blood sample is used. The plasma levels can be obtained from DBS levels using the formula “Plasma levels (analyte) = DBS levels analyte (1 – hematocrit).” The plasma levels of Bu estimated using this formula were higher than