European Specialization in Oncology Pharmacy (EUSOP)

1. Basics of Oncology Pharmacy (18 Hours)

	Education Content	International Webinars	National Trainings	International Workshop
1.A.	Quality Standarts of Oncology Pharmacy			
1.A.1.	Quality Standarts of Oncology Pharmacy (Quapos) ESOP	60		
1.A.2.	Quality Management Systems Around the Globe	60		
1.A.3.	Pharmacist's Involvement from Prescription to Administration			60
1.B.	The Classification and Mechanism of Action of Antineoplastic Drugs			
1.B.1.	The Classification and Mechanism of Action of Antineoplastic Drugs	120		
1.C.	Pharmacist's Involvement from Prescription to Administration			
1.C.1.	Aseptic Technique			60
1.C.2	Clean Working			60
1.C.3	Personal Protective Equipments (PPE)		20	20
1.C.4	Spill-Kit		20	20
1.C.5	Waste Disposal		20	20
1.C.6	Prescription			60
1.C.7	Methods of Dose Calculation		30	30
1.D.	Pharmacy Anticancer Drug Unit			
1.D.1.	Devices			60
1.D.2.	Automation	30		
1.D.3.	Facilities	20		
1.D.4.	Room Design	20		
1.D.5.	Furniture	20		
1.D.6.	HVAC	30		
1.E.	Monitoring and Validation			
1.E.1.	Technical Monitoring and Validation	60		
1.E.2.	Microbiological Monitoring and Validation	60		
1.F.	Working with Cytotoxic Drugs			
1.F.1.	The Risk of Working with Cytotoxic Drugs	45		
1.F.2.	Monitoring Methods in Occupational Health	45		
1.G.	Emergency in Oncology Treatment (Extravasation)		30	
	Total (hours)	9,5	2	6,5

2. Oncology Pharmacy in Practice (11 Hours)

	Education Content	International Webinars	National Trainings	International Workshop
2.A.	Formulations & Pharmakokinetics of Antineoplastic Drugs	90		
2.B.	Clinical Trials in Oncology	60		60

2.C.	The Challenge of Oral Chemotherapy & Compliance, Adherence - Methods of Enhancing	60		
2.D.	Physicochemical Stability of Cytotoxics Drugs	60		
2.E.	The Basic Principles of Oncology Therapy	60		
2.F.	Pharmacovigilance		60	
2.G.	Medication Errors / Risk Assessment	60		
2.H.	Information Sources and Literature		60	
2.I.	Nutritional Support in Cancer Patients		60	
2.J.	Pharmaceutical Intervention in Emergency Oncology			30
	Total (hours)	6,5	3	1,5
3.	**Clinical Oncology Pharmacy (46 Hours)**			
	Education Content	**International Webinars**	**National Trainings**	**International Workshop**
3.A.	Cancer Biology, Etiology, Epidemiology	120		
3.B.	Tumor classification, TNM system, grading, staging	60		
3.C.	Personalized Oncology and Predictive Molecular Diagnostic	60		
3.D.	Radiotherapy	60		
3.E.	Radio & Nuclear Pharmacy	60		
3.F.	Supportive Care			
3.F.1.	Supportive Therapy Management	60		
3.F.2.	Supportive Therapy in Clinic		60	
3.F.3.	Pharmaceutical Care Plan and Documentation		60	
3.G.	Interactions of Anticancer Drugs	60		60
3.H.	Side Effects of Anticancer Drugs	60		
3.I.	Complementary Medicine in Oncology	60		
3.J.	Patient Communication for Oncology Pharmacists			
3.J.1.	Patient Counseling		60	60
3.K.	Psycho-Oncology			60
3.L.	Clinical Presentation, Diagnosis and Treatment			
3.L.1.	Colon Cancer	120		120
3.L.2	Breast Cancer	120		120
3.L.3	Prostate Cancer	120		120
3.L.4	Melanoma	60		120
3.L.5	ALL	60		120
3.L.6	Head/Neck Cancers	60		120
3.L.7	Lung Cancer	120		120
3.M.	Treatment of Pediatric Oncology Patients	60		60
3.N.	Treatment of Geriatric Oncology Patients	60		
3.O.	Cancer Treatment of Young Adults			
3.O.1.	Chemotherapy During Pregnancy	60		

3.P.	Treatment of Oncology Patients with Organ Dysfunctions	60		
	Total (hours)	25	3	18
4.	**Biologics in Oncology Pharmacy (25 Hours)**			
	Education Content	**International Webinars**	**National Trainings**	**International Workshop**
4.A.	Introduction to Proteins & Monoclonal Antibodies			
4.A.1.	Characteristics of proteins	Document		
4.A.2.	Protein Synthesis	Document		
4.A.3.	Monoclonal Antibodies	60		60
4.B.	Introduction to Biological Medicines			
4.B.1.	Characteristics and basic concepts of biologics	60		
4.B.2.	Development of Biologics	60		
4.B.3.	Quality of Biologics	60		
4.C.	Introduction to Biosimilars			
4.C.1.	What is Biosimilars? & Biosimilar Development Part I	60		
4.C.2.	Biosimilar Development Part II	60		
4.C.3.	Future of the Biosimilars			60
4.D.	Current Practice & Regulations			
4.D.1.	Regulatory aspects of biosimilars		60	60
4.D.2.	Substitution/Interchangeability/Switching		60	120
4.D.3.	Patient Education & Counselling			120
4.D.4.	Biosimilarity Studies	60		
4.D.5.	Extrapolation between clinical indications			120
4.D.6.	Economics of biosimilars			60
4.E.	Biosimilars from Development to Clinic			
4.E.1.	1st Gen G-CSF / Erythropoietin	30		
4.E.2.	2nd Gen. Infliximab / Insulin	30		
4.E.2.	3rd Gen. Rituximab / Trastuzumab	30		
4.E.2.	Clinical Guidelines, Central	30	60	
4.F.	Concerns Regarding Biosimilars			60
4.G.	Action Plan Adaptation to Your Hospital / QMS			60
4.H.	Practical challenges implementation use of Biosimilars		60	
	Total (hours)	**9**	**4**	**12**
	General Total (hours)	**50**	**12**	**38**
	Maximal Total (hours)	**100**		