



SYLLABUS of the MODULE (SUBJECT)
General Information

Module title: TRANSPLANTOLOGY	
Module type	Obligatory/Facultative (wybrać)
Faculty PMU	Faculty of Medicine and Dentistry
Major	Medicine
Level of study	long-cycle (S2J)
Mode of study	full-time studies
Year of studies, semester	Year V
ECTS credits (incl. semester breakdown)	
Type/s of training	lectures (12h) /seminars (9h)/ practical (28h)
Form of assessment*	<input checked="" type="checkbox"/> graded assessment: <input type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral <input type="checkbox"/> non-graded assessment <input type="checkbox"/> final examination <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral
Head of the Department/ Clinic, Unit	Prof. dr hab. n. med. Kazimierz Ciechanowski
Tutor responsible for the module	Prof. dr hab. n. med. Jacek Różański / jacekrozanski@wp.pl / 91 466 12 01
Department's/ Clinic's/ Unit's website	Klinika Nefrologii, Transplantologii i Chorób Wewnętrznych PUM
Language	English

* replace into where applicable

Detailed information

Module objectives		Ethical and legal foundations of transplantation medicine. Principles and organization of organ procurement and transplantation in Poland. Fundamentals of immunology, surgery and immunosuppression in transplantology. Complications of transplant treatment.
Prerequisite /essential requirements	Knowledge	<i>Student knows the basics of internal diseases, clinical immunology and surgery.</i>
	Skills	<i>The ability to establish verbal and non-verbal communication with the patient after organ transplantation</i>
	Competences	<i>Student is guided by the good of the patient, observance of the patient's rights and medical confidentiality. Student is aware of the need for self-education.</i>

Description of the learning outcomes for the subject /module			
No. of learning outcome	Student, who has passed the (subject) knows /is able to /can:	SYMBOL (referring the standards)	Method of verification of learning outcomes*
W01	knows the basic quantitative parameters describing the efficiency of individual systems and organs, including: the range of the norm and demographic factors influencing the value of these parameters	K_B.W29	O, ET
W02	knows the genetic conditions of human blood groups and the serological conflict in the Rh system	K_C.W6	O, ET
W03	knows the symptoms of iatrogenic infections, the way they spread and the pathogens causing changes in individual organs	K_C.W17	O, ET
W04	describes the major histocompatibility pattern	K_C.W21	O, ET
W05	defines the genetic basis of the donor and recipient selection and the basis of transplant immunology	K_C.W24	O, ET
W06	knows the basic issues of surgical transplantation, indications for the transplantation of irreversibly damaged organs and tissues as well as related procedures	K_F.W14	O, ET
W07	knows the principles of suspecting and recognizing the brain death	K_F.W15	O, ET
W08	knows the legal regulations regarding transplants, artificial procreation, abortion, aesthetic procedures, palliative treatment, mental diseases	K_G.W10	O, ET
U01	can read and provide the interpretation of the microbiological tests results	K_C.U10	O, S
U02	associates images of tissue and organ damage with clinical symptoms of the diseases, medical history and results of laboratory markings	K_C.U11	O, S

U03	analyses the reactive, defensive and adaptive phenomena as well as regulatory disturbances caused by the etiological factor	K_C.U12	O, S
U05	builds an atmosphere of trust throughout the treatment process	K_D.U4	O, S
U06	informs the patient about the purpose, course and possible risk of the proposed diagnostic or therapeutic measures and obtains their informed consent	K_D.U6	O, S
U07	carries out full and targeted physical examination of an adult patient	K_E.U3	O, S
U08	evaluates and describes the somatic and mental state of the patient	K_E.U13	O, S
U09	proposes the individualization of current therapeutic guidelines and other methods of treatment in the face of ineffectiveness or contraindications to standard therapy	K_E.U18	O, S
K01	accepts the need of ethical standards	K_K01	O, S
K02	demonstrates the habit of self-education, understands the need for lifelong learning, is able to inspire and organize the learning process of other people	K_K03	O
K03	collaborates with team members; is able to cooperate in a group, taking different roles in it	K_K04	O
K04	observes the proper relations between the examiner and the examined person during the observations and functional tests performed	K_K05	O
K05	accepts the autonomy of each person	K_K09	O
K06	accepts the need to speak a foreign language	K_K10	O
K07	is aware of the patient's rights	K_K11	O
K08	can keep a medical confidentiality	K_K14	O

Table presenting LEARNING OUTCOMES in relation to the form of classes								
No. of learning outcome	Learning outcomes	Type of training						
		Lecture	Seminar	Practical	Clinical classes	Simulations	E-learning	Other...
W01	knows the basic quantitative parameters		X		X			
W02	knows the genetic conditions of human blood		X		X			
W03	knows the symptoms of iatrogenic infections, the		X		X			
W04	describes the major histocompatibility pattern		X		X			
W05	defines the genetic basis of the donor and		X		X			
W06	knows the basic issues of surgical transplantation,		X		X			
W07	knows the principles of suspecting and		X		X			
W08	knows the legal regulations regarding transplants,		X		X			
U01	can read and provide the interpretation of the		X		X			
U02	associates images of tissue and organ damage		X		X			
U03	analyses the reactive, defensive and adaptive		X		X			
U05	builds an atmosphere of trust throughout the		X		X			

U06	informs the patient about the purpose, course and		X		X			
U07	carries out full and targeted physical examination		X		X			
U08	evaluates and describes the somatic and mental		X		X			
U09	proposes the individualization of current		X		X			
K01	accepts the need of ethical standards				X			
K02	demonstrates the habit of self-education,				X			
K03	collaborates with team members; is able to				X			
K04	observes the proper relations between the				X			
K05	accepts the autonomy of each person				X			
K06	accepts the need to speak a foreign language				X			
K07	is aware of the patient's rights				X			
K08	can keep a medical confidentiality				X			

Table presenting TEACHING PROGRAMME			
No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes
Lectures			
TK01	Ethical and legal foundations of transplantation medicine in Poland. Criteria of human death. Organ / tissue donor.	1	K_G.W10 K_F.W15
TK02	Transplantation immunology. Recipient's qualification for transplantation.	1	K_C.W21 K_C.W24 K_C.W6, K_D.U6 K_E.U13
TK03	Transplantacja narządów jamy brzusznej i klatki piersiowej.	1	K_F.W14
TK04	Principles of immunosuppressive treatment.	1	K_C.U14 K_E.U18
TK05	Complications after organ transplantation.	1	_B.W29 K_C.W17, K_E.U3 K_C.U10, K_C.U12 K_C.U11, K_D.U4

Booklist
Obligatory literature:
1. Danovitch M.G. Handbook of Kidney Transplantation. Lippincott Williams & Wilkins. Philadelphia. 2001
Supplementary literature:
1. Cierpka L., Durlik M. Transplantologia kliniczna. terMedia, Poznań, 2015.
2. Durlik M., Rutkowski B. Zalecenia dotyczące immunosupresji po przeszczepieniu narządów unaczynionych. Fundacja Zjednoczeni dla Transplantacji. Warszawa 2014.

Student's workload	
Form of student's activity (in-class participation; activeness, produce a report, etc.)	Student's workload [h]

	Tutor
Contact hours with the tutor	40
Time spent on preparation to seminars/ practical classes	5
Time spent on reading recommended literature	5
Time spent on writing report/making project	
Time spent on preparing to colloquium/ entry test	
Time spent on preparing to exam	
Other	
Student's workload in total	50
ECTS credits for the subject (in total)	2
Remarks	

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquim

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedia presentation

other...