



Examination Specifications Solid Organ Transplantation Pharmacy Board of Pharmacy Specialties

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| Name of Credential | BPS Board-Certified Transplant Pharmacist |
| Certification-Issuing Body | Board of Pharmacy Specialties |
| Designation Awarded | BCTXP |
| Level of Proficiency | Specialty Certification |
| Target Population | Pharmacists who evaluate and provide pharmacotherapy to patients who are donors, candidates, or recipients of solid organ transplants |
| Program Purpose | To validate that the pharmacist has the advanced knowledge, skills, and experience to optimize outcomes by managing complex medication regimens for patients who are donors, candidates, or recipients of solid organ transplants |
| Eligibility Requirements | <ul style="list-style-type: none">• Graduation from a pharmacy program accredited by the Accreditation Council for Pharmacy Education (ACPE) or a program outside the United States that qualifies the individual to practice in the jurisdiction• Current, active license or registration to practice pharmacy in the United States or another jurisdiction• One of the following, within the past 7 years:<ul style="list-style-type: none">○ At least 4 years of specialty area practice with at least 50% of time spent in the scope defined by the exam content outline○ Completion of PGY1 pharmacy residency and at least 2 years of specialty area practice experience with at least 50% of time spent in the scope defined by the exam content outline○ Completion of PGY2 residency in Solid Organ Transplantation Pharmacy <p><i>Residency programs must be accredited by or deemed candidate status by the American Society of Health-System Pharmacists (ASHP) for PGY1, PGY2, and International Pharmacy Practice Residency Programs, or accredited by the Canadian Pharmacy Residency Board (CPRB) for year-1 programs.</i></p> |
| ECO Creation Date | November 2022 |

This document serves as examination specifications and certification scheme according to the respective requirements of the NCCA 2021 and ISO-IEC 17024:2012 standards.

For more information about the BCTXP examination program, please refer to the BPS website and candidate's guide: www.bpsweb.org/specialty-exams/candidates-guide/.

Examination Content Outline

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| 1 | Solid Organ Transplantation |
| 1A | Transplant Biology |
| 1A1 | Organ Anatomy and Physiology |
| 1A2 | Diseases Leading to End-Stage Organ Failure |
| 1A3 | Transplant Immunology |
| 1B | Transplantation Process |
| 1B1 | Organ-Specific Criteria for Living Donation |
| 1B2 | Organ-Specific Criteria for Transplant Listing |
| 1B3 | Organ Allocation and Scoring |
| 1B4 | Pre-Transplant Evaluation |
| 1B5 | Transplant Surgical Procedure and Potential Complications |
| 2 | Therapeutics and Patient Management |
| 2A | Treatment Planning |
| 2A1 | Clinical Assessment and Diagnostic Testing |
| 2A2 | Allergy and Drug Intolerance |
| 2A3 | Pharmacodynamics |
| 2A4 | Pharmacokinetics |
| 2A5 | Pharmacogenomics |
| 2A6 | Immunization |
| 2A7 | Desensitization |
| 2A8 | Social Determinants of Health |
| 2A9 | Special Populations (e.g., pediatric, geriatric, HIV, pregnancy) |
| 2B | Therapeutic Implementation |
| 2B1 | Immunosuppression |
| 2B2 | Pharmacotherapy of Comorbid Disease States |
| 2B3 | Non-Pharmacologic Treatments and Preventative Health Maintenance |
| 2B4 | Medication Reconciliation and Optimization |
| 2B5 | Medication Delivery (e.g., routes of administration, delivery devices, anatomic alterations) |
| 2B6 | Drug Interactions |
| 2B7 | Patient and Caregiver Education and Counseling |
| 2B8 | Patient Assistance Resources |
| 2C | Treatment Outcomes and Monitoring |
| 2C1 | Therapeutic Targets and Endpoints |
| 2C2 | Therapeutic and Physiological Monitoring |
| 2C3 | Adverse Drug Events |
| 2C4 | Medication Adherence |
| 2C5 | Infections and Malignancies |
| 2C6 | Allograft-Specific Complications |
| 2C7 | Post-Transplantation Comorbidities (e.g., new-onset diabetes, osteoporosis, hypertension) |
| 3 | Professional Practice |
| 3A | Quality of Care |
| 3A1 | Clinical Practice Guidelines |
| 3A2 | Quality Assurance and Performance Improvement |

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| 3A3 | Medication Safety |
| 3A4 | Interprofessional Care Coordination |
| 3B | Practice Management |
| 3B1 | Research Methods and Statistics |
| 3B2 | Professional Practice Standards and Regulations |
| 3B3 | Ethics and Patient Advocacy |
| 3B4 | Medical Insurance Plans and Coverage |
| 3B5 | Collaborative Practice Agreements |
| 3B6 | Education of Pharmacy Learners |

The examination content outline is a product of a job analysis (aka role delineation study) that includes facilitation of discussions with a representative panel of 15-20 subject matter experts who identify competencies required for safe and effective pharmacy practice in this specialty area as well as a validation survey soliciting endorsement of the identified competencies from certified pharmacists in this specialty area. The job analysis process is conducted every 5 years to help ensure that the competencies in the examination content outline reflect current pharmacy practice in the specialty area.

Examination Administration and Scoring

| <u>Number of Examination Items</u> | | Certification Exam | Recertification Exam |
|------------------------------------|--|--------------------|----------------------|
| 1 | Solid Organ Transplantation | 32 | 19 |
| 1A | Transplant Biology | 17 | 10 |
| 1B | Transplantation Process | 15 | 9 |
| 2 | Therapeutics and Patient Management | 112 | 63 |
| 2A | Treatment Planning | 34 | 19 |
| 2B | Therapeutic Implementation | 41 | 23 |
| 2C | Treatment Outcomes and Monitoring | 37 | 21 |
| 3 | Professional Practice | 31 | 18 |
| 3A | Quality of Care | 15 | 9 |
| 3B | Practice Management | 16 | 9 |
| TOTAL | | 175 | 100 |

| | Certification Exam | Recertification Exam |
|---------------------------------|--------------------|----------------------|
| Exam Administration Time | 4 hours 23 minutes | 2 hours 30 minutes |
| Minimum Score | 200 | 200 |
| Minimum Passing Score | 500 | 500 |
| Maximum Score | 800 | 800 |

The certification examination is split into two parts with an optional break (up to 30 minutes) in between. Part 1 consists of 100 items (2 hours 30 minutes) and Part 2 consists of 75 items (1 hour 53 minutes).

Maintenance of Certification

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| <p>Recertification Requirements</p> | <p>Pharmacists who earn the BCTXP designation will be required to maintain their certification over a 7-year period by completing one of the following recertification pathways:</p> <ul style="list-style-type: none"> • Achieving a passing score on the BCTXP recertification examination in their seventh year following certification • Earning continuing education credit <p>The BPS Board of Directors approved a 2-year self-reported continuing pharmacy education (CPE) recertification model for Board-Certified Transplant Pharmacists (BCTXP) to bridge the time between when the first specialists are recognized and the upcoming BPS Recertification request for proposal (RFP), with the potential for new recertification options in 2024. As part of this transition plan, successful completion of any ACPE-accredited CPE activities that align with the Solid Organ Transplantation Pharmacy Specialty content outline can be used towards the recertification credit requirement.</p> <p><i>Certificants must self-report at least 5 hours, but no more than 15 hours annually, during the transition window (effective from 1/1/2022 to 12/31/2023). Self-reported CPE activities must align with the BCTXP Content Outline in order to be accepted. Beginning January 1, 2024, following the 2-year transition window, those holding the BCTXP credential must use the recertification pathway approved for the remainder of their recertification cycle.</i></p> <p><i>For more details regarding recertification, please refer to the BPS Recertification Guide.</i> https://www.bpsweb.org/recertification/recertification-guide/</p> |
| <p>Ethics and Professionalism</p> | <p>The Board of Pharmacy Specialties ascribes to the belief that certification carries an obligation for ethical behavior and professionalism necessary in all conduct. Candidates or certificants who are found to have exhibited unethical behavior or lack of professionalism may be prevented from pursuing certification or may be subject to suspension or withdrawal of certification, at the discretion of the Board of Pharmacy Specialties.</p> <p><i>Please refer to the BPS Ethics and Professionalism Policy:</i> https://www.bpsweb.org/wp-content/uploads/2015/11/ethics.pdf</p> |