

# Mayo Clinic Pharmacy Grand Rounds

## Activity Description

Mayo Clinic Pharmacy Grand Rounds Podcast is a weekly podcast delivered by pharmacists to healthcare professionals who routinely manage the selection and monitoring of medication(s) as part of their patient care duties. Each week, speakers deliver insight to healthcare providers on evidence-based pharmacology topics in nearly every specialty area. The podcast content applies to pharmacists, physicians, physician assistants, and nurse practitioners in the inpatient and ambulatory care practice settings who care for neonatal through geriatric patient populations.

## Target Audience

This activity is appropriate for physicians, pharmacists, nurse practitioners, physician assistants, residents, fellows, students and allied health professionals.

## Learning Objectives

Upon conclusion of this activity, participants should be able to:

- Select patient-specific pharmacotherapy for a broad scope of disease states
- Recall evidence-based literature to direct medication best-practices
- Identify controversial pharmacology topics and their potential impact on patient care

Attendance at this Mayo Clinic course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

## Accreditation Statement



In support of improving patient care, Mayo Clinic College of Medicine and Science is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC) to provide continuing education for the healthcare team.

## Credit Statement(s)

### AMA

The Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 74.75 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### ACPE



Mayo Clinic College of Medicine and Science designates this educational activity for a maximum of 74.75 ACPE Knowledge -based contact hours. Participants should claim only the credit commensurate with the extent of their participation in the activity.

### ANCC

Mayo Clinic College of Medicine and Science designates this enduring material for a maximum of 74.75 ANCC contact hours. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

### AAPA



Mayo Clinic College of Medicine and Science has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. Approval is valid until 09/01/2024. This activity is designated for 74.75 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

## Disclosure Summary

As a provider accredited by Joint Accreditation for Interprofessional Continuing Education, Mayo Clinic College of Medicine and Science must ensure balance, independence, objectivity and scientific rigor in its educational activities. All who are in a position to control the content are required to disclose all financial relationships with any ineligible company. Faculty will also identify any off-label and/or investigational use of pharmaceuticals or instruments discussed in their content for FDA compliance.

***Listed below are individuals with control of the content of this program who have disclosed...***

### ***Relevant financial relationship(s) with ineligible companies:***

Patrick M. Wieruszewski, Pharm.D., BCCCP

Consultant: La Jolla Pharmaceutical Company

***All relevant financial relationships listed for these individuals have been mitigated.***

### ***No relevant financial relationship(s) with ineligible companies:***

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Natalie T. Hagy, Pharm.D.

Abby K. Hendricks, Pharm.D.

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Kelli C. Herrin, Pharm.D., R.Ph.

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Kyle A. Hess, Pharm.D., R.Ph.

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Christi A. Jen, Pharm.D.

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 Katelyn (Kate) R. Neverman, Pharm.D.  
 Casey R. O'Connell, Pharm.D.  
 Pooja Ojha Pharm.D.  
 Joseph C. Osborne II, Pharm.D.  
 Ashley O. Otto, Pharm.D.  
 Shannon L. Piche, Pharm.D.  
 Hannah L. Poppen, Pharm.D.  
 Marissa Z. Powell, Pharm.D.  
 Taylor E. Praska, Pharm.D., R.Ph.  
 Ashley Kate Ragan, Pharm.D.  
 Jamie Reed, Pharm.D., BCPS  
 Mikhaila L. Rice, Pharm.D.  
 Mohammad Z. Rizwan, Pharm.D.  
 Caitlin C. Schanz, Pharm.D., R.Ph.  
 Garrett E. Schramm, Pharm.D.  
 Hannah Sauer, Pharm.D.  
 Cassandra J. Schmitt, Pharm.D.  
 Diana J. Schreier, Pharm.D., R.Ph., MBA  
 Robert J. Schroeder, Pharm.D.  
 Sydney E. Schultz, Pharm.D.  
 Rachel M. Sheehan, Pharm.D.  
 Lee P. Skrupky, Pharm.D.  
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 Scott A. Soefje, Pharm.D., R.Ph.  
 Sarah E. Stieven, Pharm.D.  
 Devon S. Stonerock, Pharm.D.  
 Lauren R. Stonerock, Pharm.D.  
 Kamryn R. Storm, Pharm.D., R.Ph.  
 Hailey A. Thompson, Pharm.D., R.Ph.  
 Kristina M. Thurber, Pharm.D., R.Ph.  
 Deann N. Tims, Pharm.D.  
 Jai Yin Townley, Pharm.D., BCPS  
 Yen Tran, Pharm.D., M.B.A.  
 Audrey J. Umbreit, Pharm.D., BCACP  
 Nicholas J. Vollmer, Pharm.D.  
 Kyle S. Wamsley, Pharm.D.  
 Michaela E. Wermers, Pharm.D.  
 Andrew J. Webb, Pharm.D.  
 Kristina L. Westcott, Pharm.D.  
 Andrew (Andy) F. Wiener, Pharm.D., R.Ph.  
 Erin D. Wieruszewski, Pharm.D., BCCCP  
 Alex B. Wontor, Pharm.D.  
 Nikitha Yagnala, Pharm.D.  
 Ming (May) M. Zhang, Pharm.D., R.Ph.  
 Joseph J. Zieminski, Pharm.D.

***References to off-label and/or investigational usage(s) of pharmaceuticals or instruments in their presentation:***

|                              |                                                                                                                                                                                                                                                                                     |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mikhaila L. Rice, Pharm.D.   | Merck & Co, Inc. - Letermovir                                                                                                                                                                                                                                                       |
| Allison P. Golbach, Pharm.D. | Dronabinol, Nabilone                                                                                                                                                                                                                                                                |
| Andrew J. Webb, Pharm.D.     | X-Gen Pharamceuticals, Inc. – Neomycin<br>Eli Lilly & Co – Vancomycin, Tobramycin<br>Sandoz Inc – Amikacin<br>Merck Inc. – Gentamicin<br>Pfizer Inc. – linezolid, Clindamycin<br>Janssen Inc – Levofloxacin<br>Bayer Pharmaceuticals – Ciprofloxacin<br>Sanofi, LLC – Telithromycin |
| Mikhaila L. Rice, Pharm.D.   | Merck & Co., Inc.: Letermovir                                                                                                                                                                                                                                                       |
| Casey O'Connell, Pharm.D.    | Fluoxetine, Sertraline, Citalopram, Escitalopram, Paroxetine, Fluvoxamine, Lithium, Ondansetron, Cyproheptadine, Olanzapine, Chlorpromazine                                                                                                                                         |
| Mikaela M. Hofer, Pharm.D.   | Amitriptyline, Brexanolone, Bupropion, Citalopram, Duloxetine, Escitalopram, Fluoxetine, Fluvoxamine, Nortriptyline, Paroxetine, Sertraline, Venlafaxine                                                                                                                            |
| Jade L. Kutzke, Pharm.D.     | Biogen & Genentech, Inc.: Rituximab, Novartis Pharmaceuticals, Inc.: Cyclosporine A, Hospira, Inc.: Vincristine, Cumberland Pharmaceuticals, Inc.: N-acetylcysteine, Millenium Pharmaceuticals, Inc.: Bortezomib, & Shire Pharmaceuticals, Inc.: Recombinant ADAMTS13               |
| Abby K. Hendricks, Pharm.D.  | Aripiprazole, Asenapine, Chlorpromazine, Haloperidol, Iloperidone, Lurasidone, Olanzapine, Paliperidone, Quetiapine, Risperidone, Thiothixene, Ziprasidone, Lorazepam, Melatonin, Ramelteon, Suvorexant, Valproate                                                                  |
| Alex B. Wontor, Pharm.D.     | Acetaminophen, Atenolol, Cholestyramine resin, Dexamethasone, Digoxin, Diltiazem, Esmolol, Hydrocortisone, Lithium, Saturated solution of potassium iodide (SSKI), Methimazole, Metoprolol, Propranolol, Propylthiouracil                                                           |
| Victoria R. Milano, Pharm.D. | Prednisone, Methylprednisolone, Mycophenolate, Tacrolimus, Cyclophosphamide, Infliximab, & Tocilizumab                                                                                                                                                                              |

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Deann N. Tims, Pharm.D.               | Emmaus Life Sciences, Inc.: L-Glutamine (Endari); Novartis: Crizanlizumab (Adakveo); Global Blood Therapeutics: Voxelotor (Oxbryta)                                                                                                                                                                                                                                                                                                                                                                                                            |
| Joseph C. Osborne II, Pharm.D.        | Gabapentin, Pregabalin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Jamie Reed, Pharm.D., BCPS            | Varies: Albuterol, Diphenhydramine, Famotidine, Methylprednisolone, Prednison, Ranitidine                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Nicholas J. Vollmer, Pharm.D.         | Apotex Corp., Myland Pharmaceuticals Inc.: Tranexamic Acid; Teva Pharmaceuticals USA, Inc., Heritage Pharmaceutical: Tranexamic Acid; Prasco Laboratories, Acella Pharmaceuticals, LLC: Tranexamic Acid; X-GEN Pharmaceuticals, Inc., Fresenius Kabi USA, LLC: Tranexamic Acid; American Regent, Inc.: Tranexamic Acid                                                                                                                                                                                                                         |
| Natalie A. Haddad, Pharm.D.           | Varies: Midodrine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Madison L. Fazio, Pharm.D.            | Amgen and Sobi-anakinra; Novartis-canakinumab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mikhaila L. Rice, Pharm.D.            | Janssen Biotech, Inc.-Ibrutinib; AstraZeneca-Acalabrutinib; AbbVie Inc. and Genentech USA, Inc.-Venetoclax                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Cassandra J. Schmitt, Pharm.D.        | Genentech-Tenecteplase (TNKase)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Ashley O. Otto, Pharm.D.              | Ursodeoxycholic acid (ursodiol); Diatrizoate meglumine; Diatrizoate sodium; Polyethylene glycol 3350 and electrolytes oral solution                                                                                                                                                                                                                                                                                                                                                                                                            |
| Kyle S. Wamsley, Pharm.D.             | Varies-Oral antibiotics for IE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Hannah M. Brokmeier, Pharm.D.         | Pfizer-Eplerenone; Varies-Spironolactone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Jennifer Adema, Pharm.D.              | Lilly USA LLC: Olumiant (Baricitinib); EMD Serono: Rebif (Interferon Beta-1a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mikhaila L. Rice, Pharm.D., BCPS      | Novartis Pharmaceuticals Corporation: Imatinib; Pfizer, Inc.: Sunitinib; Bayer: Regorafenib; Deciphera Pharmaceuticals, Inc.: Ripretinib; Blueprint Medicines Corporation: Avapritinib; Takeda Pharmaceutical Co. Ltd.: Ponatinib; Exelixis, Inc.: Cabozantinib; Merck, Inc.: Lenvatinib; Pfizer, Inc.: Crenolanib; Jiangsu Chia-Tai Tianqin Pharmaceutical: Anlotinib; Daiichi Sankyo: Pexidartinib; Bristol Myer Squibb: Ipilimumab, Nivolumab; Karoopharm Therapeutics: Selinexor; Merck, Inc.: Temozolomide; Novartis, Inc.: Spartalizumab |
| Yen Tran, Pharm.D., M.B.A.            | Belatacept, Bortezomib, Carfilomib, Clazakizumab, Daratumumab, Eculizumab, Imlifidase, Intravenous immunoglobulin, Obrituzumab, Rituximab, Tocilizumab                                                                                                                                                                                                                                                                                                                                                                                         |
| Nicole L. Hlavacek, Pharm.D.          | Varies: Magnesium                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Allison P. Golbach, Pharm.D., BCPS    | Azacitadine, Cytarabine, Daunorubicin, Decitabine, Filgrastim, Fludarabine, glasdegib, Idarubicin, Liposomal daunorubicin/cytarabine , Pegfilgrastim, Venetoclax                                                                                                                                                                                                                                                                                                                                                                               |
| Mikaela M. Hofer, Pharm.D.            | New Medicon Pharma, Ferring Pharmaceuticals: Terlipressin (Teripress, Glypressin), Selepressin, Adreclizumab                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Nathan T. Smith, Pharm.D., BCPS       | Varies: Leuprolide, Nafarelin, goserelin, triptorelin, buserelin, histrelin, Flutamide, bicalutamide, Spironolactone, Finasteride, dutasteride, Estradiol, conjugated estrogens, progesterone, Medroxyprogesterone acetate, Testosterone enanthate, testosterone cypionate, Testosterone undecanoate                                                                                                                                                                                                                                           |
| Erin D. Wieruszewski, Pharm.D., BCCCP | Varies: Desmopressin, Tranexamic acid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Kyle S. Wamsley, Pharm.D.             | Varies: Phenobarbital                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Natalie Haddad, Pharm.D.              | Sobi: Anakinra, Generic: Aspirin, Roche: Tocilizumab, Multiple manufacturers: Infliximab, CSL Behring AG, Grifols Therapeutics inc.: Intravenous immunoglobulin                                                                                                                                                                                                                                                                                                                                                                                |
| Mai Uyen Alissa Le, Pharm.D.          | N/A: Bivalirudin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Audrey J. Umbreit, Pharm.D., BCACP    | Varies: Baclofen, Gabapentin, Ondansetron, Topiramate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hannah M. Brokmeier, Pharm.D.         | The Medicines Company: Bivalirudin, Grifols Biologicals, Inc.: Thrombate III, GTC Biotherapeutics: Atryn                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Cassandra J. Schmitt, Pharm.D.        | Varies: Tenecteplase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sydney E. Schultz, Pharm.D.           | Takeda: Bortezomib, Genmab: Daratumumab, Varies: Dexamethasone, Thalidomide                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Marissa Z. Powell, Pharm.D.           | Eli Lilly: Olanzapine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Molly A. McCord, Pharm.D.             | Bristol Myers Squibb: Belatacept                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Kaylee A. Clark, Pharm.D.             | Various: Famotidine, Diphenhydramine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Jo Ann Leal, Pharm.D.                 | Various: Omeprazole, Pantoprazole, Sucralfate, Esomeprazole, Lansoprazole, Dexlansoprazole, Rabeprazole, Cimetidine, Famotidine, Ranitidine, Nizatidine                                                                                                                                                                                                                                                                                                                                                                                        |

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|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nikitha Yagnala, Pharm.D.              | Actavis Elizabeth, Boehringer Ingelheim, Teva: clonidine; Eli Lilly and Company: methadone; Pfizer: dexmedetomidine; Actavis Elizabeth, Apotex, Impax Labs Inc, Mylan, Sandoz: guanfacine, quetiapine, trazodone. Hospira, Inc – norepinephrine. Shire US Inc. – midodrine. Novartis Pharmaceuticals Corporation – octreotide.                                                                       |
| Divya A. Khandekar, Pharm.D., M.S.     | Boehringer-Ingelheim: Empagliflozin; AstraZeneca: Dapagliflozin (Farxiga); Novartis: Sacubitril/Valsartan (Entresto); AstraZeneca: Candesartan (Atacand); Varies: Spironolactone (Aldactone) Varies: Amifostine, Cevimeline, Donepezil, Doxepin, Octreotide, Palifermin, Genentech - Tocilizumab (Actemra), Swedish Orphan Biovitrum (Sobi) - Anakinra (Kineret), EUSA Pharma - Siltuximab (Sylvant) |
| Jennifer M. Nelson, Pharm.D.           | Albendazole, Amikacin, Clofazimine, Levofloxacin, Linezolid, Moxifloxacin, Paromomycin                                                                                                                                                                                                                                                                                                               |
| Aeryana N. Beaudrie-Nunn, Pharm.D.     | Swedish Orphan Biovitrum AB: Anakinra; Eli Lilly and Company: Baricitnib; Merck & Co., Inc; Pfizer Labs: Dexamethasone; Genentec, Inc.: Tocilizumab; Gilead Sciences, Inc.: Remdesivir; Sanofi-Aventis U.S. LLC: Sarilumab                                                                                                                                                                           |
| Rachel J. Johnson, Pharm.D.            | Carbamazepine, Corticosteroids, Eculizumab, Gabapentin, Immune globulin                                                                                                                                                                                                                                                                                                                              |
| Jai Yin Townley, Pharm.D., BCPS        | Cholestyramine, Clonidine, Octreotide, Pancreatic enzymes, Pantoprazole, Omeprazole                                                                                                                                                                                                                                                                                                                  |
| Cassandra J. Schmitt, Pharm.D.         | Merck: Molnupiravir; Pfizer: Nirmatrelvir/ritonavir; GlaxoSmithKline and Vir Biotechnology, Inc.: Sotrovimab                                                                                                                                                                                                                                                                                         |
| Rachael M. Sheehan, Pharm.D., R.Ph.    | Merck Share & Dohme Copr: Aprepitant, Varies: Benzodiazepines, Capsaicin, Corticosteroids, Droperidol, Haloperidol, Eli Lilly: Olanzapine, Varies: Opioids, Propranolol, Tricyclic antidepressants                                                                                                                                                                                                   |
| Stacy A. Bernard, Pharm.D., R.Ph.      | Cyclosporine (modified and non-modified), Tacrolimus (immediate and extended release), Sirolimus, Everolimus, Prednisone                                                                                                                                                                                                                                                                             |
| Michaela E. Wermers, Pharm.D., R.Ph.   | Ferric carboxymaltose, Iron sucrose, Iron dextran, Ferric gluconate                                                                                                                                                                                                                                                                                                                                  |
| Molly A. McCord, Pharm.D., R.Ph.       | antithymocyte globulins, basiliximab, belatacept, mycophenolate mofetil, mycophenolate sodium, sirolimus, valganciclovir                                                                                                                                                                                                                                                                             |
| Lauren M. Dolly, Pharm.D. P.Ph.        | Olanzapine, Risperidone, Lithium, Lamotrigine, Liothyronine, Ketamine, L-methylfolate                                                                                                                                                                                                                                                                                                                |
| Hannah M. Brokmeier, Pharm.D           | Pfizer / Hospira - calcium chloride, epinephrine, methylprednisolone, sodium bicarbonate, vasopressin                                                                                                                                                                                                                                                                                                |
| Kaylee A. Clark, Pharm.D.              | Imatinib, Dasatinib, Sorafenib, Midostaurin, Gilteritinib, Azacitidine                                                                                                                                                                                                                                                                                                                               |
| Andrew J. Jatis, Pharm.D.              | Abbvie - Dalbavancin (Dalvance®), Melinta Therapeutics - Oritavancin (Orbactiv®). Hospira, Inc – norepinephrine. Shire US Inc. – midodrine. Novartis Pharmaceuticals Corporation – octreotide. Various: furosemide, torsemide, bumetanide, metolazone, chlorothiazide, acetazolamide.                                                                                                                |
| Kyle A. Hess, Pharm.D., R.Ph.          | Bayer – Aspirin, Bristol-Meyers/Sanofi Pharmaceuticals – Clopidogrel, AstraZeneca – Ticagrelor, Eli Lilly – Prasugrel, La Jolla Pharmaceutical - Angiotensin II, Various – Vasopressin, Insulin, Dextrose, Glucagon, Calcium Gluconate, Calcium Chloride, Methylene Blue, Lipid Emulsion, Epinephrine, Norepinephrine, Dobutamine, Dopamine, Milrinone                                               |
| Aeryana Nichet Beaudrie-Nunn, Pharm.D. | Bristol-Myers Squibb Company – Apixaban, Boehringer Ingelheim Pharmaceuticals, Inc. – Dabigatran, Daiichi Sankyo Co., LTD. – Edoxaban, Janssen Pharmaceuticals, Inc. – Rivaroxaban                                                                                                                                                                                                                   |
| KaShena L. Kennedy, Pharm.D.           | Alexion Pharmaceuticals - eculizumab                                                                                                                                                                                                                                                                                                                                                                 |
| Sarah A. Chase, Pharm.D., R.Ph.        | Various – Ertapenem, Meropenem, Piperacillin/tazobactam, Infliximab, Adalimumab, Golimumab, Certolizumab, Ustekinumab, Vedolizumab                                                                                                                                                                                                                                                                   |
| Devon S. Stonerock, Pharm.D.           | Various – Cyclosporine, Eltrombopag, Posaconazole, Fluconazole, Sulfamethoxazole/trimethoprim, Dexamethasone, EUSA Pharma – Siltuximab, Sobi – Anakinra,                                                                                                                                                                                                                                             |
| Megan A. Galle, Pharm.D.               | Alexion Pharmacueticals - Eculizumab                                                                                                                                                                                                                                                                                                                                                                 |
| Uzoamaka C. Abajue, Pharm.D.           | Pfizer – Dextrazoxane, Genetech - Tocilizumab (Actemra), Swedish Orphan Biovitrum (Sobi) - Anakinra (Kineret), EUSA Pharma - Siltuximab (Sulvant)                                                                                                                                                                                                                                                    |
| Mark P. Layden, Pharm.D., R.Ph.        | Various - Ascorbic acid                                                                                                                                                                                                                                                                                                                                                                              |
| Alejandro Del Rio Verduzco, Pharm.D.   | Baxter Healthcare Corporation – Immune globulin/gammagard liquid, Amgen – Filgrastim, Epoetin Alfa, Novartis – Eltrombopag, Various – Levofloxacin, Cefdinir                                                                                                                                                                                                                                         |

|                                        |                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Caitlin C. Schanz, Pharm.D., R.Ph.     | Multiple – Dexamethasone, Hydrocortisone, Methylprednisolone, Prednisolone, Prednisone, Warfarin, Heparin, Rivaroxaban, Apixaban, Aspirin, Argatroban, Bivalirudin, Enoxaparin |
| Ming (May) M. Zhang, Pharm.D., R.Ph.   | Multiple – Dalteparin, Enoxaparin, Tinzaparin, Unfractionated Heparin                                                                                                          |
| Shienna Anne Braga, Pharm.D., R.Ph.    | TerSera Therapeutics – goserelin, Watson Pharmaceuticals – triptorelin, AbbVie Inc - leuprolide                                                                                |
| Christopher R. Cahoon, Pharm.D., R.Ph. | Amgen – Denosumab, Multiple – Ibandronate, Novartis Pharmaceuticals Corporation – Pamidronate, Multiple – Zolendronic acid                                                     |
| Kristina M. Thurber, Pharm.D., R.Ph.   | Multiple – Topiramate, Bupropion, Naltrexone                                                                                                                                   |
| Taylor E. Praska, Pharm.D., R.Ph.      | Paratek Pharmaceuticals – Omadacycline, Tetraphase Pharmaceuticals - Eravacycline                                                                                              |
| Jonathan G. Leung, PharmD, BCPS, BCPP  | Multiple - Clozapine                                                                                                                                                           |
| Kelli C. Herrin, Pharm.D., R.Ph.       | Multiple – diflunisal, doxycycline, tauroursodeoxycholic acid [TUDCA], epigallocatechin-3-gallate [EGCG]                                                                       |
| Hailey A. Thompson, Pharm.D., R.Ph.    | Eli Lilly - Donanemab                                                                                                                                                          |

For disclosure information regarding Mayo Clinic School of Continuous Professional Development accreditation review committee member(s) please visit: <https://ce.mayo.edu/content/disclosures>.

## Disclaimer

Participation in this Mayo Clinic educational activity does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course. You should be aware that substantive developments in the medical field covered by this recording may have occurred since the date of original release.

## Prerequisites for Participation

There are no prerequisites needed prior to participating in this education activity.

## Method of Participation

Participation in this activity consists of listening to the online podcast and completing the post-test and evaluation.

## How to Obtain Credit

To obtain credit, complete the post-test, evaluation and submit.

## Release and Expiration Dates

|                  |                   |
|------------------|-------------------|
| Release Date:    | September 2, 2020 |
| Expiration Date: | September 1, 2024 |

## Acknowledgement of Commercial Support

No commercial support was received in the production of this activity.

## Faculty and Course Director Listing and Credentials

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Andrew J. Herber, P.A.-C.  
Joshua P. Fenske, APRN, CNP, DNP  
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Faculty:

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Jennifer L. Adema, Pharm.D., M.B.A.  
Benjamin (Ben) J. Anderson, Pharm.D., R.Ph.  
Kaitlyn J. Bailey, Pharm.D.  
Aeryana N. Beaudrie-Nunn, Pharm.D.  
Stacy A. Bernard Pharm.D.  
Mackenzie L. Bevry Pharm.D.  
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