What Makes a Drug "Special?" Defining Specialty Medications

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Learning Objectives

- 1. Determine the characteristics that classify drugs as specialty medications
- 2. Explain the roles of specialty pharmacies
- 3. Describe basic benefit design and channel management strategies for specialty medications
- 4. Discuss various aspects of biosimilars, including naming mechanisms and limitations to market uptake



Specialty Drugs

- No universal definition
- Drug-specific characteristics lead to specialty designation
- Why does it matter?
 - Coverage implications
 - Distribution implications



- Manufactured through a biotechnology process
- Special handling requirements
- Customized dosing
- Complex delivery methods
- Chronic, complex, and/or rare disease target
- Clinical support essential to effective outcome
- Reimbursement complexities
- High cost

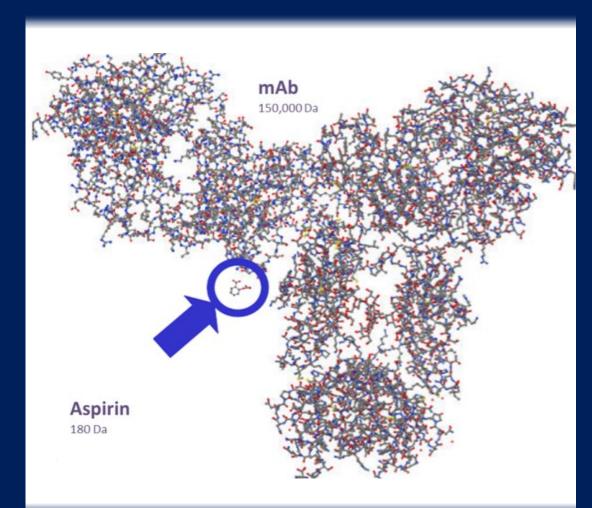


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Biotechnology Manufacturing Process

Complex, large, unstable moleculesOften derived from living organisms





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Special Storage/Handling Requirements

Some products must stay refrigerated, frozen





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Kymriah [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals Corporation; 2020.

Image from ClinicalOMICs. 2017.



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Customized Dosing

Dosing

- Body surface area
- Blood levels
- Genetic factors

Total lifetime doses

• Doxorubicin max lifetime dose < 550 mg/m²



Customized Dosing

Intralesional Injection

Injection Volume Based on Lesion Size			
Lesion size (longest dimension)	Injection volume		
> 5 cm	Up to 4 mL		
> 2.5 cm to 5 cm	Up to 2 mL		
> 1.5 cm to 2.5 cm	Up to 1 mL		
> 0.5 cm to 1.5 cm	Up to 0.5 mL		
<u><</u> 0.5 cm	Up to 0.1 mL		

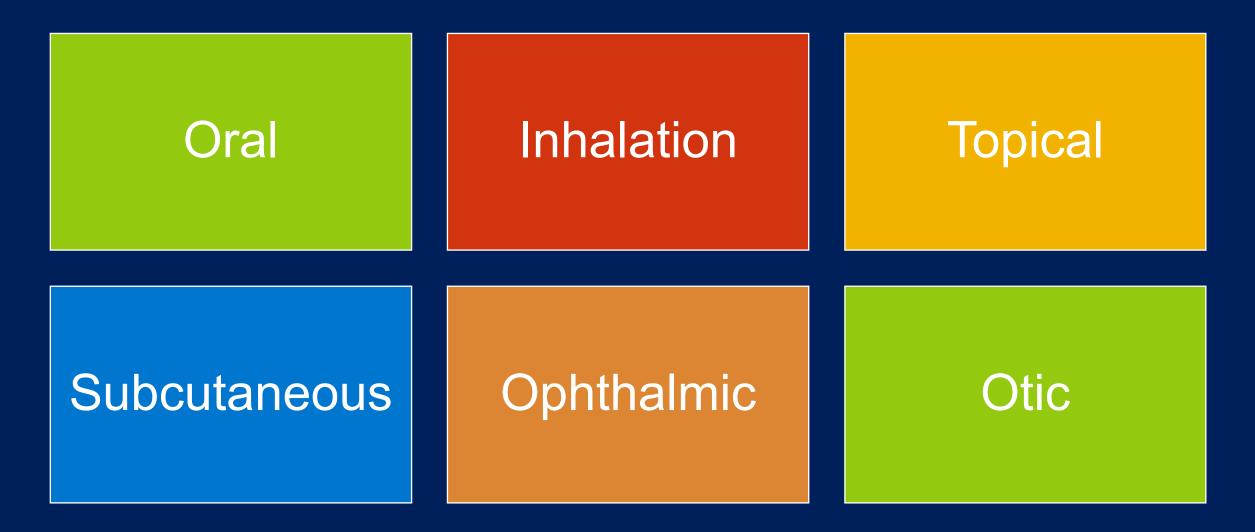
Imlygic [prescribing information]. 2019.



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Common Drug Delivery Methods





Complex Drug Delivery Methods

Intravitreal Injection [e.g., aflibercept (Eylea[®])]

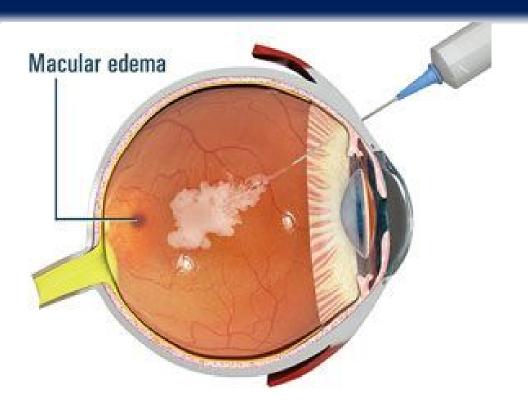


Image from North Shore Eye Centre.



Complex Drug Delivery Methods

• Intraventricular Injection [e.g., cerliponase alfa (Brineura®)]

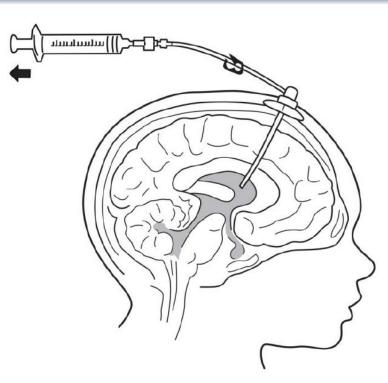
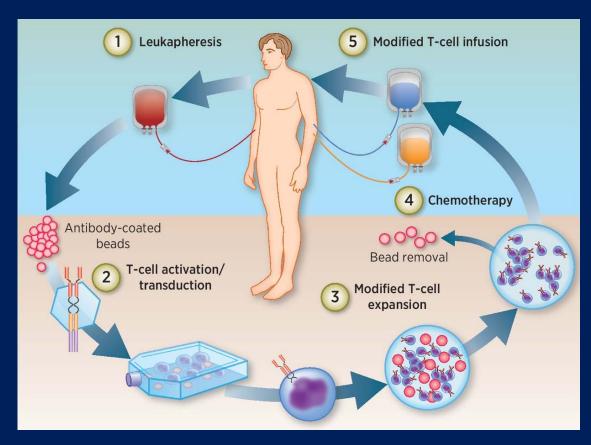


Image from Brineura [prescribing information]. 2020.



Complex Drug Delivery Methods

Chimeric Antigen Receptor (CAR)-T Therapy



Kymriah [prescribing information]. 2020. | Collins F. NIH Director's Blog. 2017.

Image from: ThermoFisher Scientific 2017.



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Rare and/or Complex Diseases

Cancers	Hemophilia	Cystic fibrosis	
Multiple sclerosis	Pulmonary fibrosis	Hereditary angioedema	
Pulmonary hypertension	Hutchinson- Gilford Progeria	Neuromyelitis Optica Spectrum Disorder	



Prevalent Diseases with Specialty Drugs

Gout		Astl	nma	Hepatitis C
High cholesterol			opic natitis	Plaque psoriasis
Rheumatoid arthritis			tance sorder	



Orphan Drugs

- Used for very rare conditions
 - "Orphan diseases" affect < 200,000 patients
- Few or no therapeutic alternatives
- Examples
 - Lomitapide (Juxtapid[®]) for homozygous familial hypercholesterolemia
 - Elexacaftor/tezacaftor/ivacaftor (Trikafta®) for cystic fibrosis
 - Aripiprazole (Abilify[®]) for Tourette's syndrome



Orphan Drug Designation

Type of exclusivity offered by the FDA upon drug approval

Patent and Exclusivity for: N021436

Product 006 ARIPIPRAZOLE (ABILIFY) TABLET 2MG

Exclusivity Data

Product No	Exclusivity Code	Exclusivity Expiration
006	ODE-80	12/12/2021



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Necessary Clinical Support

Timely and accurate fulfillment of prescriptions	Disease specific education	Adherence assistance
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Follow-up between office visits Management of adverse reactions, interactions



Specialty Pharmacies

- Focus on the proper dispensing of specialty drugs
- Owned by
 - Health plans
 - Pharmacy benefit managers
 - Retail/community pharmacies
 - Wholesalers
 - Private owners
- Most dispensing is done through mail



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Reimbursement Complexities

Drugs picked up at a pharmacy

Reimburse the pharmacy

Drugs administered by a provider

Reimburse the doctor

Drugs bought at the pharmacy & administered by a provider

• Reimburse...?



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Cost of Specialty Medications

- Average \$79,000 per year
- Nearly half of all drug spending
 - Only 2% of the population
- Specialty defined as cost > \$670 per month for Medicare



Sales Forecasts

Projected Rank	Generic Name	Brand Name	Forecasted Sales
1	Adalimumab	Humira	\$20 bn
2	Pembrolizumab	Keytruda	\$16.8 bn
3	Lenalidomide	Revlimid	\$12.7 bn
4	Apixaban	Eliquis	\$10.5 bn
5	Aflibercept	Eylea	\$8.9 bn
6	Nivolumab	Opdivo	\$8.8 bn
7	Ustekinumab	Stelara	\$8.4 bn
8	Bictegravir, emtricitabine, and tenofovir alafenamide	Biktarvy	\$8.4 bn
9	Ibrutinib	Imbruvica	\$7.6 bn
10	Rivaroxaban	Xarelto	\$7.6 bn



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2	Pembrolizumab	Keytruda	\$16.8 bn
3	Lenalidomide	Revlimid	\$12.7 bn
4	Apixaban	Eliquis	\$10.5 bn
5	Aflibercept	Eylea	\$8.9 bn
6	Nivolumab	Opdivo	\$8.8 bn
7	Ustekinumab	Stelara	\$8.4 bn
8	Bictegravir, emtricitabine, and tenofovir alafenamide	Biktarvy	\$8.4 bn
9	Ibrutinib	Imbruvica	\$7.6 bn
10	Rivaroxaban	Xarelto	\$7.6 bn

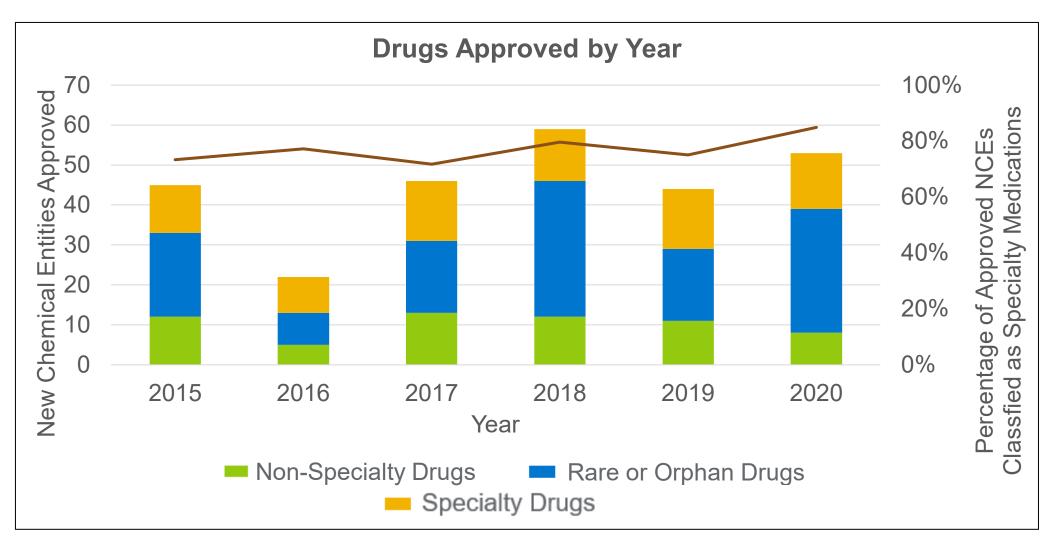


High Cost Specialty Drugs

Rank	Generic Name	Brand Name	Use	Annual Cost of Therapy
1	Onasemnogene abeparvovec	Zolgensma	Spinal muscular atrophy	\$2,125,000
2	Metreleptin	Myalept	Lipodystrophy	\$855,678
3	Voretigene neparvovec	Luxturna	Retinal dystrophy	\$850,000
4	Pralatrexate	Folotyn	T-cell lymphoma	\$793,870
5	Cerliponase alfa	Brineura	Neuronal ceroid lipofuscinosis type 2	\$716,040



Specialty Drug Approvals





- Formulary design
- Pharmacy versus medical benefits
- Utilization management
- Copay card programs
- Contracting
- Case and disease management



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Formulary Design

Specialty tier

Coinsurances versus copays

• Average coinsurance is 26%

Maximum out-of-pocket limits

Preferred and non-preferred specialty tiers

Kaiser Family Foundation. 2020.



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Pharmacy or Medical Benefits

- Different schools of thought
 - All drugs under pharmacy benefit
 - Provider-administered drugs under the medical benefit
- Benefit design strategies
 - Prevent pharmacy premium increases
 - Coverage may differ by benefit



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Utilization Management

Prior Quantity Authorization

Authorization Duration

Limits



Biosimilars

- Typical generics show bioequivalence
- Biosimilars show no meaningful difference in safety, potency, purity
 - "Highly similar" to an FDA-approved biologic product
 - Not generics, not interchangeable
- Biosimilar naming
 - Unique proprietary name
 - Meaningless suffix added to the nonproprietary name



Biosimilars

Expected cost savings

- 40-95% cost reduction for generics
- 25-40% cost reduction for biosimilars

Uptake limited by

- Inability to automatically substitute
- Different biosimilars covered by different plans
- Prescriber hesitancy, lack of awareness
- Patent litigation and other manufacturer interference



Approved Oncology Biosimilars

Originator	Nonproprietary Name	Biosimilar Suffix	Biosimilar Brand Name		
Neupogen	filgrastim	<mark>-sndz</mark> -aafi	Zarxio Nivestym		
Neulasta	pegfilgrastim	-cbqv -jmdb -bmez -apgf	Udenyca Fulphila Ziextenzo Nyvepria		
Epogen	epoetin alfa	-epbx	Retacrit		
Avastin	bevacizumab	-awwb -bvzr	Mvasi Zirabev		
Herceptin	trastuzumab	-dkst -pkrb -dttb -anns -qyyp	Ogivri Herzuma Ontruzant Kanjinti Trazimera		



Other Approved Biosimilars

Originator	Nonproprietary Name	Biosimilar Suffix	Biosimilar Brand Name		
Rituxan	rituximab	-abbs -pvvr -arrx	Truxima Ruxience Riabni		
Remicade	infliximab	-dyyb -abda -qbtx -axxq	Inflectra Reflexis Ixifi Avsola		
Enbrel	etanercept	-szzs -ykro	Erelzi Eticovo		
Humira	adalimumab	-atto -adbm -adaz -afzb -bwwd -fkjp	Amjevita Cyltezo Hyrimoz Abrilada Hadlima Hulio		



- Formulary design
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Copay Card Programs

- Managed care organizations hate copay cards
- Copay accumulator programs
 - Copay cards no longer count toward deductibles and max out-of-pocket limits
- Copay maximizer programs
 - Maximum value of copay card is applied evenly throughout the year



- Formulary design
- Pharmacy versus medical benefits
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Contracting

Specialty pharmacy contracting

- Performance guarantees
- Narrow networks, limited distribution drugs

Manufacturer contracting

- Done on non-specialty medications as well
- Outcomes-based or value-based contracts

Site of care strategies

- Home health
- Specific sites



- Formulary design
- Pharmacy versus medical benefits
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Conclusion

- No universal definition
- Increasing number of high cost specialty medications
- Variety of trend management strategies



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References

- Barone J, Jardina PE. New therapies and the role of specialty pharmacy providers. Pharmacy Times. 2018. Available at: https://www.pharmacytimes.com/publications/specialty-pharmacy-times/2018/January-2018/New-Therapies-andthe-Role-of-Specialty-Pharmacy-Providers
- Brineura [prescribing information]. Novato, CA. BioMarin Pharmaceutical Inc.; 2020.
- Chase L. The 10 most expensive drugs in the U.S., period. GoodRx. Available at: https://www.goodrx.com/blog/mostexpensive-drugs-period/
- Collins F. FDA approves first CAR-T cell therapy for pediatric acute lymphoblastic leukemia. 2017. Available at: https://directorsblog.nih.gov/2017/08/30/fda-approves-first-car-t-cell-therapy-for-pediatric-acute-lymphoblasticleukemia/
- Express Scripts. 2019 drug trend report. 2020. Available at: https://www.express-scripts.com/corporate/drug-trend-report
- Hahn SM. Rare disease day 2020: FDA continues important work on treatments for rare diseases. U.S. Food and Drug Administration. 2020. Available at: https://www.fda.gov/news-events/fda-voices/rare-disease-day-2020-fda-continues-important-work-treatments-rare-diseases
- Imlygic [prescribing information]. Thousand Oaks, CA: BioVex, Inc.; 2019.
- iPharmaCenter. Expected best selling pharmaceutical products (drugs) in 2021. 2021. Available at: https://www.ipharmacenter.com/post/expected-best-selling-pharmaceutical-products-drugs-in-2021
- Joachim R. Weighing the potential of Humira biosimilars in the U.S. Competitive dynamics analysis. Biosimilar Development. 2020. Available at: https://www.biosimilardevelopment.com/doc/weighing-the-potential-of-humirabiosimilars-in-the-u-s-competitive-dynamics-analysis-0001

References



- Kymriah [prescribing information]. East Hanover, NJ: Novartis Pharmaceuticals Corporation; 2020.
- Li E, Ramanan S, Green L. Pharmacist substitution of biological products: issues and considerations. J Manag Care Spec Pharm. 2015;21(7):532-539.
- Schondelmeyer SW, Purvis L. Trends in retail prices of prescription drugs widely used by older Americans: 2017 yearend update. AARP Public Policy Institute. 2019. Available at: https://www.aarp.org/content/dam/aarp/ppi/2019/09/trends-in-retail-prices-of-prescription-drugs-widely-used-by-olderamericans.doi.10.26419-2Fppi.00073.003.pdf
- U.S. Food and Drug Administration. Biosimilar product information. 2020. Available at: https://www.fda.gov/drugs/biosimilars/biosimilar-product-information
- U.S. Food and Drug Administration. Generic competition and drug prices. 2019. Available at: https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/generic-competition-and-drug-prices
- U.S. Food and Drug Administration. New Drug Therapy Approvals 2020. 2021. Available at: https://www.fda.gov/drugs/new-drugs-fda-cders-new-molecular-entities-and-new-therapeutic-biological-products/newdrug-therapy-approvals-2020
- U.S. Food and Drug Administration. Nonproprietary naming of biological products Guidance for industry. 2017. Available at: https://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM459987.pdf
- U.S. Food and Drug Administration. Orange book: approved drug products with therapeutic equivalence evaluations. https://www.accessdata.fda.gov/scripts/cder/ob/index.cfm



References for Images

- GalChimia. Are cancer immunotherapy and small molecules compatible? 2018. Available at: https://www.galchimia.com/are-cancer-immunotherapy-and-small-molecules-compatible/
- Amgen. Imlygic clinical overview and handling guide. 2019. Available at: https://cdn.imlygichcp.com/cdn/917dac5d-ff46-4382-bb1e-8a4041ae951b/en/1/20201222t152404z/imlygic-clinical-overview.pdf
- Clinical OMIC. FDA Approves Novartis' Kymriah As First CAR-T Cancer Immunotherapy. 2017. Available at: https://www.clinicalomics.com/topics/oncology/fda-approves-novartiskymriah-as-first-car-t-cancer-immunotherapy/
- North Shore Eye Centre. Intravitreal triamcinolone. Available at: http://www.northshoreeye.com.au/intravitreal-triamcinolone/
- ThermoFisher Scientific. A huge step forward for immunotherapy: FIRST ever FDA approved CAR-T cell therapy. 2017. Available at: https://www.thermofisher.com/blog/behindthebench/ahuge-step-forward-for-immunotherapy-first-ever-fda-approved-car-t-cell-therapy/