IRDiRC
INTERNATIONAL RARE DISEASES RESEARCH CONSORTIUM

Orphan Drug Development Guidebook

Building Block U201

This document defines the content of the Building Block created for each identified tool, incentives, initiative or practice introduced by public bodies or used by developers to expedite drug development in Rare Diseases (RDs).

ITEM	DESCRIPTION
Building Block (BB) Title	USA Orphan Drug Designation (US-ODD)
References	https://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/HowtoapplyforOrphanProductDesignation/default.htm https://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/HowtoapplyforOrphanProductDesignation/ucm598062.htm
Description	The Orphan Drug Act (ODA) provides for granting special financial incentives to a sponsor developing a drug or biological product ("drug") to treat a rare disease or condition upon request of that sponsor. This status is referred to as orphan designation (or sometimes "orphan status"). A rare disease or condition is defined as any disease or condition which: • Affects less than 200,000 persons in the US, or • Affects more than 200,000 in the US and for which there is no reasonable expectation that the cost of developing and making available in the US a drug for such condition will be recovered from sales in the US of such drug. The ODA is intended to provide incentives for Orphan Drug development and to defray the costs of qualified clinical testing expenses incurred in connection with the development of drugs for rare diseases and conditions. The procedure typical consists of a review cycle of approximately 90 days: • Will either receive: – Designation Letter OR – Deficiency Letter • Once designated, sponsor is required to submit annual reports until drug is approved

Category	Regulatory Building Block
Geographical scope	United States of America
Availability	Applicants developing medicines for rare diseases.
Scope of use	ODD, along with other tools of the FDA Office of Orphan Products Development (OOPD), allows to advance the evaluation and development of products (drugs, biologics, devices, or medical foods) that demonstrate promise for the diagnosis and/or treatment of rare diseases or conditions. A sponsor may seek orphan designation for a specified rare disease or condition of a previously unapproved drug, or of a new use for an already marketed drug.
Stakeholders	• The orphan drug developer • OOPD • CBER • CDER
Enablers / Requirements	The disease or condition for which the drug is intended affects fewer than 200,000 people in the United States or, if the drug is a vaccine, diagnostic drug, or preventive drug, the persons to whom the drug will be administered in the United States are fewer than 200,000 per year. For a drug intended for diseases or conditions affecting 200,000 or more people, or for a vaccine, diagnostic drug, or preventive drug to be administered to 200,000 or more persons per year in the United States, there is no reasonable expectation that costs of research and development of the drug for the indication can be recovered by sales of the drug in the United States.
Output	Orphan Drug Designation
Best time to apply and time window	A developer may request orphan drug designation any time after obtaining non-clinical proof-of-principle data, until before Biological Licence Application (BLA) submission. In most cases, the best time is when you enter clinical phase. ODD granted during development is re-evaluated and confirmed at the time of the BLA submission.

Expert tips	Guidance on Orphan Drug designation, common issues in rare diseases drug development, requesting meeting with FDA , and other topics are available on the FDA's Office of Orphan Products Development website: https://www.fda.gov/ForIndustry/DevelopingProductsforRareDiseasesConditions/default.htm
	
	Interested parties may also request meetings with OOPD staff – either via phone or face-to-face for advice on Orphan products related programs or overcoming issues stated in a deficiency letter.
	
	PROs:
	
	– Orphan designation provides for financial incentives and defraying of costs to drug sponsors for development and marketing of the orphan drug. In details:
	  ○ Market Exclusivity – The first sponsor of a designated orphan drug to obtain FDA marketing approval for the designated rare disease or condition receives seven years of marketing exclusivity.
	  ○ Tax credit – A sponsor may claim as tax credits 25% of the qualified clinical research costs for a designated orphan product.
	  ○ Waiver of Prescription Drug User Fees – The sponsor's fee as prescribed by the Prescription Drug User Fee Act (PDUFA Fees) at the time of submitting a marketing application to FDA are waived for a designated product.
	  ○ Pediatric Research Equity Act (PREA) Waiver: FDA grants full waiver of pediatric studies
	
	CONs:
	
	– There are no risks. There are no costs to requesting Orphan designation, and a negative decision does not otherwise undermine the development of the drug for its intended use.