# HISTORICAL MILESTONES

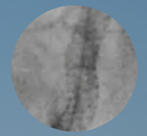
## in Coronary Artery Stents

### 1964

**The Stent is Conceptualized:** "The Father of Intervention," Charles Dotter, describes coronary angioplasty using an implantable prosthetic device.[1]

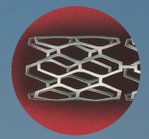
### 1986

**Investigational Implantation Begins:** Ulrich Sigwart and Jacques Puel implant the first investigational stent in a human coronary artery.[2]



### 1993

**Stents Deemed an Acceptable Treatment Option:** The FDA approves stents to treat acute and compromised vessel closure after failed balloon angioplasty.[2]



### 1994

**Bare-Metal Stents are Approved in the U.S.:** The first bare-metal stent, designed by Julio C. Palmaz and Richard Schatz, is approved by the FDA.[3]

### 2003

**Technology Shifts to Drug-Eluting Stents (DES):** The first generation permanent polymer DES was approved by the FDA to open arteries and prevent re-narrowing.[4]


### 2015

**FDA Approves First Bioabsorbable Polymer DES:** The polymer is gone when it's no longer needed, shortly after the drug is completed eluted at 3 months.[5]

1 Payne, M. M. (2001). Charles Theodore Dotter: The Father of Intervention. US National Library of Medicine National Institutes of Health, 28-38.
2 Javaid Iqbal, J. G. (2013). Coronary stents: Historical development, current status and future directions. John Hopkins University Department of Interventional Cardiology, 1-19.
3 Ariel Roguin, M. P. (2011). Historical Perspectives in Cardiology. Stent: The Man and Word Behind the Coronary Metal Prosthesis. AHA Circulation: *Cardiovascular Interventions*, 206-209.
4 Department of Health & Human Services (2003). CYPHER (TMsymbol) Sirolimus-Eluting Coronary Stent FDA Approval.
5 Wilson, G.J., et al. *Catheter Cardiovasc Interv*. 2015.