**Mock Document #1: Clinical Development Plan (CDP)**

**Title:** *Clinical Development Plan for Dapagliflozin in Heart Failure with Reduced Ejection Fraction (HFrEF)*  
**Version:** 1.0  
**Prepared By:** Clinical Strategy Team  
**Date:** [Fictional] August 2023

**1. Product Overview**

* **Compound Name:** Dapagliflozin
* **Mechanism of Action:** SGLT2 inhibitor that reduces renal glucose reabsorption, improves glycemic control, and shows cardioprotective effects.
* **Therapeutic Area:** Cardiovascular — Heart Failure with Reduced Ejection Fraction (HFrEF)
* **Target Population:** Adults (≥18 years) with NYHA Class II–IV HFrEF, LVEF ≤40%

**2. Clinical Development Objectives**

* Evaluate dapagliflozin’s impact on time-to-event cardiovascular outcomes in patients with HFrEF
* Establish safety and tolerability in both diabetic and non-diabetic heart failure populations
* Demonstrate benefit on secondary outcomes including quality-of-life and renal biomarkers

**3. Clinical Study Strategy**

| **Phase** | **Study Design** | **Key Objectives** |
| --- | --- | --- |
| Phase 1 | PK/PD studies in healthy volunteers | Dose finding, renal clearance, food effect |
| Phase 2 | Multicenter, randomized, placebo-controlled (n=600) | Exploratory efficacy, biomarker trends |
| **Phase 3** | **Global, double-blind, placebo-controlled (n=4500)** | **Primary CV endpoints, mortality, safety** |

**4. Endpoints Overview**

**Primary Endpoint:**

* Time to first occurrence of CV death or hospitalization for heart failure

**Key Secondary Endpoints:**

* Change in KCCQ clinical summary score at Week 12
* Change in NT-proBNP levels
* All-cause mortality
* Worsening renal function (eGFR decline ≥40%)

**5. Study Rationale**

Despite guideline-based therapies, patients with HFrEF continue to experience high event rates. Recent trials suggest SGLT2 inhibitors may reduce HF-related hospitalization and improve functional status even in non-diabetic populations. Dapagliflozin has a well-characterized safety profile in diabetes and CKD. This program aims to confirm its benefit-risk in HFrEF and enable a label extension.

**6. Regulatory Milestones (Planned)**

| **Milestone** | **Timeline** |
| --- | --- |
| End-of-Phase 2 FDA Meeting | Q3 2023 |
| Phase 3 First Patient In | Q1 2024 |
| NDA Submission | Q2 2026 |

**7. Risk Mitigation Summary**

* Monitoring for volume depletion, renal function, and genitourinary AEs
* Independent Data Monitoring Committee (IDMC)
* Interim analysis plan included with early stopping rules for futility or overwhelming efficacy

**8. Source Documents Referenced**

* Investigator Brochure v5.0
* Phase 2b clinical study report
* Regulatory feedback from pre-IND meeting (FDA, EMA)
* Market landscape and unmet need assessment (internal deck)