Assessing High-Dose Versus Standard-Dose Influenza Vaccine Protection Against Severe Outcomes in Older Adults with Chronic Conditions

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Disclaimer: The comparator standard-dose vaccine used in the trial is not licensed in the U.S.

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STUDY OVERVIEW

Why Chronic Conditions Matter

9/10 people hospitalized with influenza have **at least one underlying health condition**.[1]

Studies show adults with **CHF** and **diabetes are ~4.2x** and **1.57x** more likely, respectively, to be **hospitalized with influenza** versus those without these conditions.[2,3]

Presence of **AF** during influenza hospitalization is associated with **1.56x** higher odds of **in-hospital mortality**.[4]

Among older adults (≥65 years) hospitalized with influenza in the USA in 2025–26, **33.9%** had renal disease and **44.2%** had chronic lung disease.[5]

HD-IIV

- Contains **4x** the antigen of SD-IIV[6]
- Was developed to provide **increased protection** in older adults[6]
- Has demonstrated **superior efficacy** against laboratory-confirmed influenza in a pivotal RCT[6]

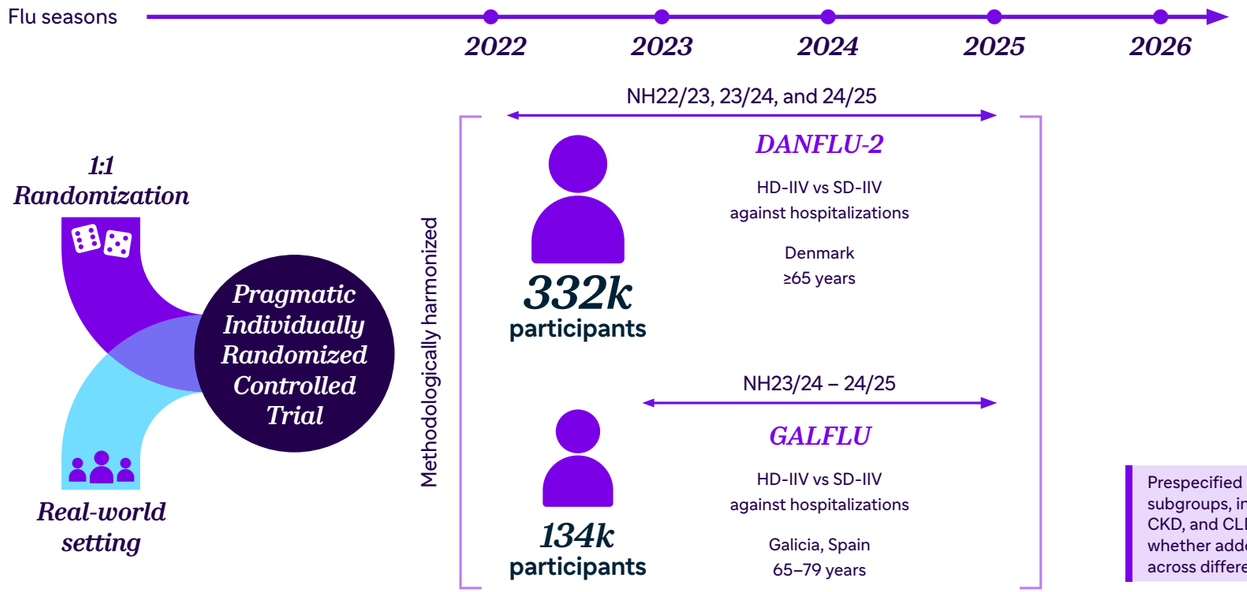
FLUNITY-HD Study Design

Prespecified **pooled analysis** of **methodologically harmonized**, individually randomized DANFLU-2[7] and GALFLU[8] trials[9]

466,320 participants enrolled across Denmark and Spain[9]

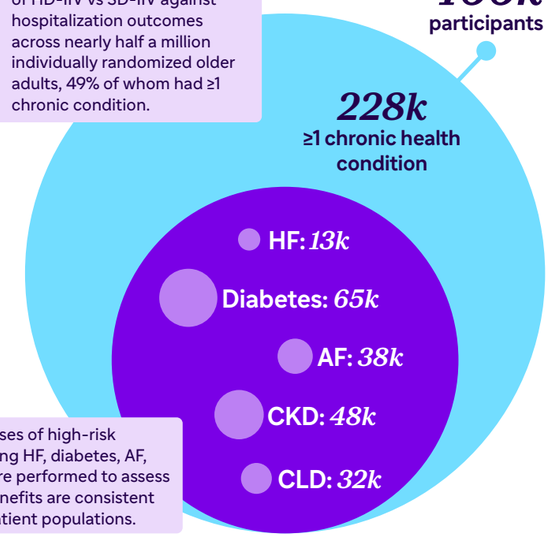
Pragmatic design using real-world healthcare registry-based data[9]

The largest individually randomized influenza vaccine effectiveness study in older adults.[9]



FLUNITY-HD (Pooled Analysis)[9]

Designed to assess the benefit of HD-IIV vs SD-IIV against hospitalization outcomes across nearly half a million individually randomized older adults, 49% of whom had ≥1 chronic condition.



Prespecified analyses of high-risk subgroups, including HF, diabetes, AF, CKD, and CLD, were performed to assess whether added benefits are consistent across different patient populations.

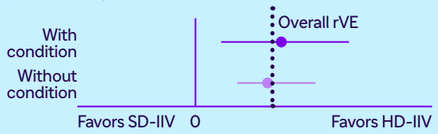
READING THE PLOT

The plot on the right shows the primary endpoint, **rVE of HD-IIV over SD-IIV for influenza/pneumonia hospitalization**, for patients with and without each chronic condition.

Benefit of HD-IIV vs SD-IIV

Effect modification asks whether having the condition changes the size of the HD-IIV benefit over SD-IIV.

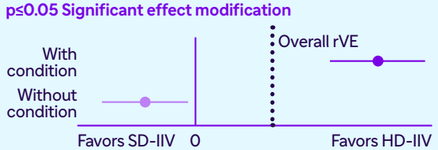
p>0.05 No significant effect modification



Benefit similar in both groups

Markers sit close together, CIs overlap.

p≤0.05 Significant effect modification



Benefit differs between groups

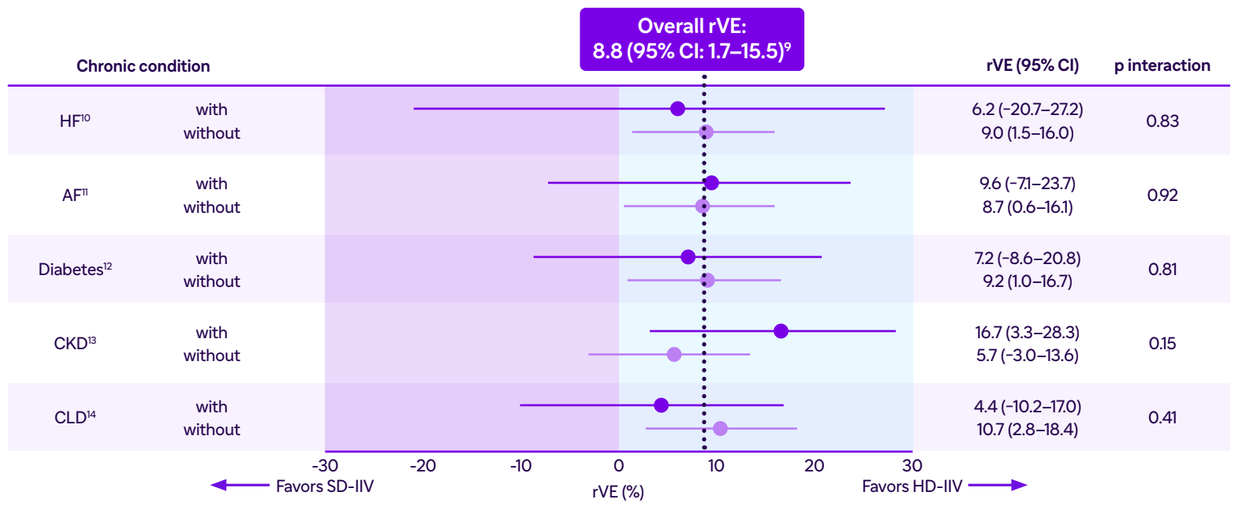
Markers far apart, CIs do not overlap.

p for interaction does not test whether HD-IIV outperformed SD-IIV; that was assessed in the overall population.

PRESPECIFIED SUBGROUP RESULTS

Hospitalization for Pneumonia or Influenza

Consistent relative benefit of HD-IIV versus SD-IIV across chronic condition subgroups



SUMMARY OF RESULTS

HD-IIV provided **superior protection** compared to SD-IIV against the primary endpoint (hospitalization for influenza or pneumonia; **rVE: 8.8%**; 95% CI: 1.7–15.5) and reduced the incidence of cardiorespiratory hospitalization.[9]



superior protection

Relative benefit of HD-IIV over SD-IIV against hospitalization was **consistent** across **older adults with and without** five common chronic conditions, with no significant effect modification.[10-14]



Relative benefit was consistent

Abbreviations:

AF: atrial fibrillation; CHF: congestive heart failure; CKD: chronic kidney disease; CLD: chronic lung disease; HD-IIV: high-dose inactivated influenza vaccine; HF: heart failure; NH: northern hemisphere; rVE: relative vaccine effectiveness; SD-IIV: standard-dose inactivated influenza vaccine; vs: versus.

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