

# Temporal Window Comparison: Our Study vs. Previous Literature

Extended Lag Analysis Reveals Previously Undetected 21-Day Effects

**PREVIOUS STUDIES:**

- Barnett et al. 2007 (Australia)
- Modesti et al. 2006 (Mediterranean)
- Brook et al. 2011 (Global Review)
- Yang et al. 2015 (China)
- Halonen et al. 2011 (Finland)
- Madaniyazi et al. 2016 (Japan)
- Wang et al. 2020 (USA)
- Ye et al. 2012 (China)
- Kenny et al. 2010 (Canada)
- African Studies (Various)

**Previous Studies:**

- Max observation: 14 days
- Typical window: 0-7 days
- Peak found: 3-5 days

Days 14-21 Never Studied  
**CRITICAL GAP**

**Our Innovation:**

- Extended to 21 days
- Peak effect at day 21
- Larger effect than day 0-7
- Changes monitoring protocols

**OUR STUDY 2025:**

**South Africa (n=18,205)**

Cardiovascular (n=4,957)

Metabolic (n=2,731)

Immune (n=1,283)

**Sample Size Comparison:**

Previous largest: n=14,000 (metabolic only)

**Our study: n=18,205 (multi-system)**

