



# A1c Confidence

## Through HPLC Methodology

### Accurate A1c Results Start With the Right Technology

HPLC delivers the confidence of both an A1c value and a chromatogram, helping the laboratory ensure the validity of the A1c result

#### HPLC technology allows the laboratory personnel:

- Detection of common variants (HbS, HbD, HbC, HbE)
- Verification of result integrity during lab analysis
- Low risk of misreports caused by interference

### Why Technology Matters to Support Reliable A1c Testing in the Laboratory

#### HPLC (High Proficiency Liquid Chromatography)

- Separates hemoglobin fractions using **ion-exchange** chromatography
- Reduces the risk of **falsely high or low A1c** in the presence of variants
- Provides the laboratory with analytical insight to support A1c result validity

#### Immunoassay / Chemistry

- Relies on an **antibody-antigen** reaction to generate an A1c value
- **Potential interference** with A1c result depending on the type of Hb variant
- Laboratories may be unaware of possible inaccurate A1c results

### Explain the risk simply:

When chromatographic information is not available at the laboratory:



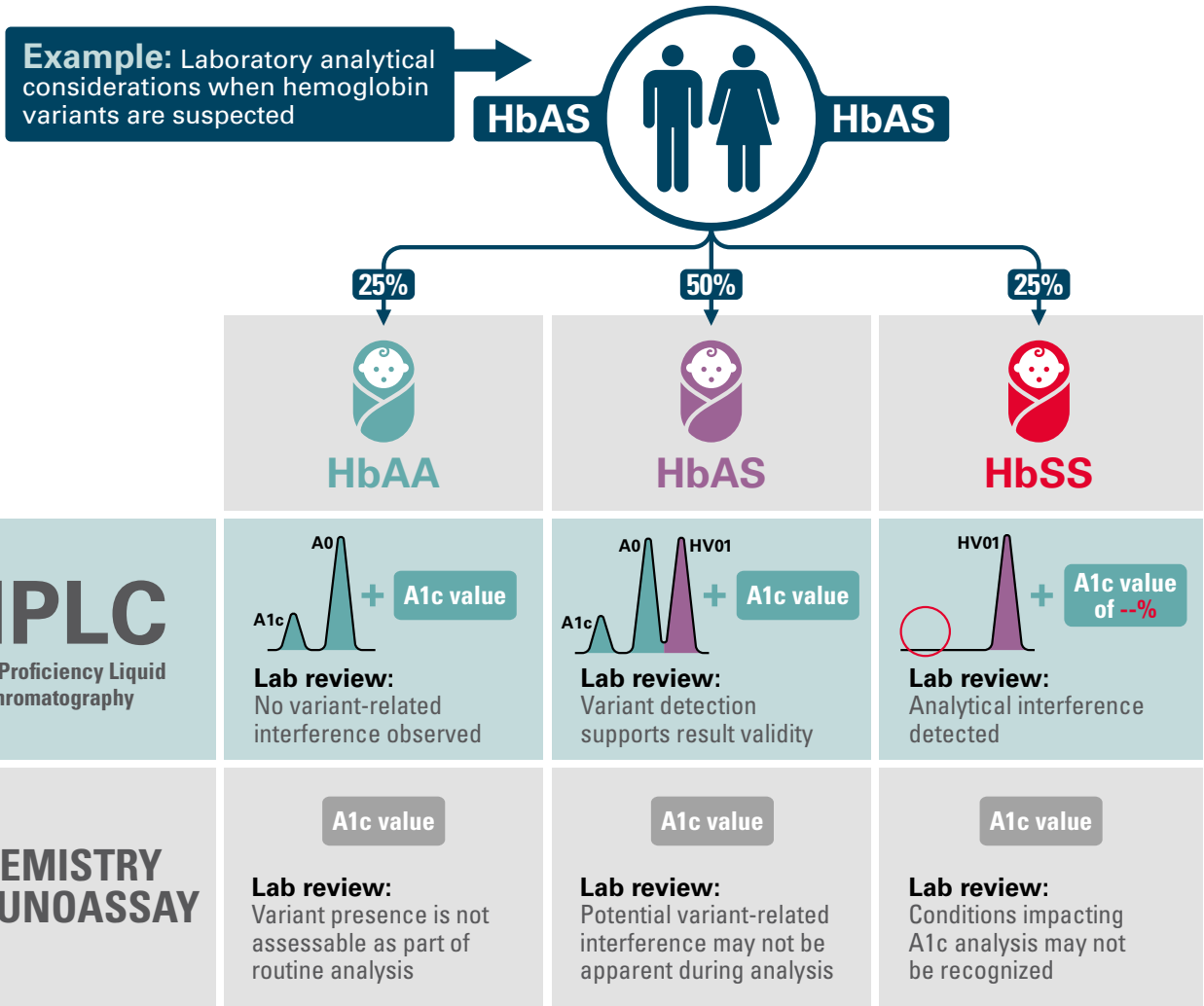
Hemoglobin variants **may affect A1c measurements**



Potential **Interferences may go unrecognized, impacting confidence in A1c results.**

# Confidence Through HPLC Technology

HPLC A1c testing supports laboratory assessment of potential analytical interferences to help ensure result validity



HPLC helps address this risk by enabling laboratory assessment through the **separation of hemoglobin fractions**



G801



G8



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