

ISBT128 2D DataMatrix Barcode Implementation – FAQs for Laboratories and Hospitals

Q1: Why is the barcode symbology changing?

Australia is moving to the globally recognised label standards. Adopting these barcodes:

- improves traceability in the blood and blood product supply chain, which enhances safety and supply security
- improves inventory management and financial sustainability
- ensures that blood products are given a unique and unmistakable identification, which increases efficiencies
- provides internationally standardised product codes and definitions for blood components, which facilitates global compliance and benchmarking
- stops duplication of donation identification numbers (DIN) within a 100-year period worldwide.

Q2: When will the fresh blood product component labels change?

The barcode symbology for all fresh blood products funded under the national blood arrangements will be transitioning to ISBT128 only. The introduction of an ISBT128 2D DataMatrix will occur on **30 November 2025**. The removal of the Codabar Transition label will occur on **31 March 2029**. After that time, labels will no longer include the Codabar barcode.

Q3: What are the changes to the component label?

- The ISBT128 DataMatrix will be introduced to the fresh blood product component labels on **30 November 2025**.
- The Codabar barcode (bottom section) will be removed from all fresh blood product component labels on **31 March 2029**.
- The label will reduce in size to 100mm x 100mm on **31 March 2029**.

Q4: What will the new component label look like?

- Fresh blood product component labels will be updated to include the following:
 - ISBT128 2D DataMatrix
 - ISBT128 linear barcodes
 - Human readable information.
- The ISBT128 linear barcodes and eye-readable information appearing in the upper portion of the current label will remain.
- A 2D DataMatrix will be added on **30 November 2025**. The placement of the 2D DataMatrix on the label is still being finalised.

- Example fresh blood product component labels with the ISBT128 2D DataMatrix have been released to enable Australian Health Provider testing. The example labels are available on the NBA website.

Q5: Who is responsible for updating the Laboratory Information Systems and barcode readers?

- Facilities using Codabar barcodes transitioning to the ISBT128 Labelling Standard or the 2D DataMatrix will be responsible for updating their Laboratory Information Systems and infrastructure, including barcode scanners.
- Lifeblood will be able to provide a sample of an updated ISBT128 Blood Component Label with the 2D DataMatrix barcode to Australian Health Providers to assist with upgrading IT systems and barcode scanners.

Q6: What if I am already using the ISBT128 linear barcode?

- The ISBT128 linear barcodes can still be used without utilising the 2D barcode. Facilities already using the ISBT128 linear barcode can choose to not update their Laboratory Information Systems and infrastructure, including barcode scanners and continue to use the linear code.

Q7: What is the advantage of updating infrastructure to use the 2D DataMatrix?

- The ISBT 128 linear and 2D DataMatrix barcodes represent best practice for blood product labelling. We can encode the same information contained in multiple linear codes into the 2D DataMatrix as a single ISBT 128 barcode. This technology will prepare us for the future and allow more rapid scanning of blood components at the point of issue and receipt.
- All commercial blood products supplied under the national blood arrangements (plasma, recombinant and diagnostic) are transitioning to GS1 2D DataMatrix in line with international standards. There is not an option for GS1 linear barcodes with the updated packaging.
- Updating Laboratory Information Systems and infrastructure, including barcode scanners will allow facilities to scan blood and blood products supplied under the national blood arrangements.

Q8: How will I manage mixed inventory?

- The implementation dates relate to fresh blood components coming off the manufacturing line and issued to Australian Health Providers.
- There will be a cross-over period where inventory held at Lifeblood and Australian Health Providers may have both the current and new labels.
- The introduction of the ISBT128 2D DataMatrix on **30 November 2025** will only result in a minor change to the label. You will still be able to use the ISBT128 linear barcode, Codabar and human readable information. The Codabar transition label will be removed on **31 March 2029**.

Q9: Where can I get more information?

Technical information regarding the ISBT128 standard is available from the following resources.

- Detailed information about ISBT128 is available via the [Australian Guidelines for the Labelling of Blood Components Using ISBT 128](#)
- Technical information about ISBT128 is available on the [International Council for Commonality in Blood Banking Automation \(ICCBBA\) website](#)
- Information on changes to barcode symbology used on blood and blood products funded under the national arrangements is available [Barcode specifications for blood and blood products funded under the National Blood Arrangements](#)