

Exergen TAT-5000S – Frequently Asked Questions (FAQ) for Use in Saudi Arabia

1. Use and Application

IS THE TEMPORAL ARTERY THERMOMETER A NON-CONTACT DEVICE?

No. The Exergen Temporal Artery Thermometer requires gentle contact with the skin. The probe head must remain flush to the skin. Place it in the middle of the forehead while softly scanning from the middle to the left of the right by gently touching the forehead.

WHO SHOULD USE THE THERMOMETER ON FEMALE PATIENTS?

In accordance with cultural and professional standards in Saudi Arabia, only female nurses or healthcare workers should take temperature measurements from female patients using the TAT-5000S.

HOW SHOULD THE TEMPORAL ARTERY THERMOMETER BE USED?

When properly positioned, the thermometer is gently stroked across the forehead from the center to the hairline, passing over the Temporal Artery. During this process:

- The sensor captures naturally emitted infrared heat at 1,000 readings per second, identifying the highest temperature point.
- Simultaneously, it records the ambient temperature.
- The patented Arterial Heat Balance (AHB) software then synthesizes these inputs to provide an accurate core temperature reading.

HOW CAN I ENSURE THE FOREHEAD IS CLEAR FOR ACCURATE MEASUREMENT IF THE PATIENT WEARS A FACE COVERING OR HEADSCARF?

For accurate use:

- Ask the patient politely and respectfully to adjust their veil, niqab, or headscarf to momentarily expose the forehead area.
- Only a female nurse or caregiver should request or assist in this adjustment if the patient is female.
- Ensure the skin on the forehead is free from hair, moisture, or fabric before scanning.

If the forehead is not accessible due to cultural or medical reasons, there are several alternative options available:

- Insert the probe in the apex of the axilla for about 2-3 seconds

Or

- Scan in a zig-zag pattern across the lateral thoracic artery 2-3 times. You need to scan on the rib cage only, since that makes it certain that the artery is close to the skin – remember that it tickles.

2. Technology and Measurement Principles

WHAT DOES THE TEMPORAL ARTERY THERMOMETER MEASURE?

It captures the infrared heat naturally emitted from the skin over the Temporal Artery, along with ambient temperature, and uses patented algorithms to compute accurate arterial body temperature.

HOW DOES THE TECHNOLOGY WORK?

- One sensor detects the arterial skin temperature, locking in the peak reading.
- Another sensor detects ambient temperature.
- The AHB software corrects for any cooling effect from the skin's surface, providing clinically accurate readings.

WHY IS THE TEMPORAL ARTERY A RELIABLE SITE FOR TEMPERATURE MEASUREMENT?

The Temporal Artery:

- Is a major artery connected directly to the heart via the carotid artery.
- Lies close to the skin's surface on the forehead, making it accessible.
- Provides stable and consistent blood flow, ideal for temperature readings.
- Has been used for fever assessment historically due to its reliability and accessibility.

3. Practical Considerations

DOES AMBIENT TEMPERATURE AFFECT THE READINGS?

Yes. The TAT-5000S compensates for room temperature changes in real-time using its built-in algorithms, ensuring accurate readings even in environments with air conditioning or elevated heat.

CAN IT BE USED ON INFANTS AND CHILDREN?

Yes. The thermometer is gentle, fast, and non-invasive, making it suitable for all ages, including infants. When taking temperature from infants who are swaddled or covered, ensure access to the forehead or behind the ear by a female caregiver, if the infant is female.

4. Troubleshooting

WHY AM I GETTING INCONSISTENT RESULTS?

Some possible causes include:

- Repeated scans on the same area can cool the skin, leading to variation.
- Sweating may affect forehead readings; in such cases, use the area behind the ear.
- Ensure the thermometer is in continuous contact with the skin during scanning.

WHAT SHOULD I DO IF A PATIENT IS COVERED AND UNABLE TO REMOVE THE COVERING?

If the forehead is not accessible due to cultural or medical reasons, there are several alternative options available:

- Insert the probe in the apex of the axilla for about 2-3 seconds

Or

- Scan in a zig-zag pattern across the lateral thoracic artery 2-3 times. You need to scan on the rib cage only, since that makes it certain that the artery is close to the skin – remember that it tickles.

5. Additional Notes for Clinical Use

- Always maintain patient dignity and privacy when requesting the removal or adjustment of face coverings.
- Use curtains or screens to provide privacy during temperature measurement procedures.
- Educate female patients, especially in rural or conservative areas, about the purpose of temporary uncovering, ensuring comfort and cooperation.
- Maintain strict hygiene and sterilization protocols when using the device on multiple patients.
- Cleaning the sensor head is a straightforward process. It requires only a cotton cloth and some medicinal alcohol. Exergen provides a comprehensive list of certified alcohol types that can be utilized for this purpose.

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