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## **List of Abbreviations**

|                                    |                                                        |
|------------------------------------|--------------------------------------------------------|
| <b><math>^{131}\text{I}</math></b> | : Radioactive iodine                                   |
| <b>AIDS</b>                        | : Acquired immunodeficiency syndrome                   |
| <b>AIT</b>                         | : Amiodarone-induced thyrotoxicosis                    |
| <b>APACHEII</b>                    | : Acute Physiology and Chronic Health<br>Evaluation II |
| <b>ATP</b>                         | : Adenosine 5'-triphosphate                            |
| <b>CKD</b>                         | : Chronic kidney disease                               |
| <b>CNS</b>                         | : Central nervous system                               |
| <b>CRP</b>                         | : C-reactive protein                                   |
| <b>CVD</b>                         | : Cardio-vascular disease                              |
| <b>DIT</b>                         | : Diiodotyrosine                                       |
| <b>FT3</b>                         | : Serum free triiodothyronine                          |
| <b>FT4</b>                         | : Serum free thyroxine                                 |
| <b>FTI</b>                         | : Free T4 index                                        |
| <b>GFR</b>                         | : Glomerular filtration rate                           |
| <b>GH</b>                          | : Growth hormone                                       |
| <b>HPT</b>                         | : Hypothalamus–pituitary–thyroid                       |
| <b>HR</b>                          | : Heart rate                                           |
| <b>hsCRP</b>                       | : Highly sensitive C-reactive protein                  |
| <b>I</b>                           | : Iodine                                               |
| <b>ICU</b>                         | : Intensive care unit                                  |

|                   |                                             |
|-------------------|---------------------------------------------|
| <b>IDI</b>        | : Integrated discrimination improvement     |
| <b>IL</b>         | : Interleukin                               |
| <b>LDL</b>        | : Low density lipoprotein                   |
| <b>MCT</b>        | : Monocarboxylate transporter               |
| <b>MIT</b>        | : Monoiodotyrosine                          |
| <b>MMI</b>        | : Methimazole                               |
| <b>MNG</b>        | : Multinodular goiter                       |
| <b>MV</b>         | : Mechanical ventilation                    |
| <b>NEFA</b>       | : Non-esterified fatty acids                |
| <b>NIS</b>        | : Sodium/iodide symporter                   |
| <b>NRI</b>        | : Net reclassification improvement          |
| <b>NSAIDs</b>     | : Non-steroidal anti-inflammatory medicines |
| <b>NTIS</b>       | : Non thyroidal illness syndrome            |
| <b>NT-pro BNP</b> | : N-terminal-pro brain natriuretic peptide  |
| <b>PTU</b>        | : Propylthiouracil                          |
| <b>RAIU</b>       | : Radioactive Iodine Uptake                 |
| <b>RCT</b>        | : Randomized control trial                  |
| <b>rT3</b>        | : Reverse T3                                |
| <b>Rt3</b>        | : Serum reverse triiodothyronine            |
| <b>SBP</b>        | : Systolic blood pressure                   |
| <b>SC</b>         | : Subclinical thyroid                       |
| <b>T2</b>         | : Diiodothyronine                           |
| <b>T3</b>         | : Triiodothyronine                          |

|                |                                      |
|----------------|--------------------------------------|
| <b>T4</b>      | : Thyroxin                           |
| <b>TBG</b>     | : Thyroxine-binding globulin         |
| <b>TBPA</b>    | : Thyroxine-binding prealbumin       |
| <b>TFTs</b>    | : Thyroid function tests             |
| <b>TG</b>      | : Thyroglobulin                      |
| <b>TgAb</b>    | : Thyrogloulin antibody              |
| <b>TH</b>      | : Thyroid hormones                   |
| <b>TNF</b>     | : Tumor necrosis factor              |
| <b>TPO</b>     | : Thyroidal peroxidase               |
| <b>TPOAb</b>   | : Thyroid peroxidase antibody        |
| <b>TRH</b>     | : Thyrotropin-releasing hormone      |
| <b>TRHtest</b> | : Thyrotropin releasing hormone test |
| <b>TSH</b>     | : Thyroid-stimulating hormone        |
| <b>TT3</b>     | : Serum total triiodothyronine       |
| <b>TT4</b>     | : Serum total thyroxine              |
| <b>TTR</b>     | : Serum transthyretin                |
| <b>UIC</b>     | : Urinary Iodine Concentration       |

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# Introduction

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## **Chapter (I)**

# **Assessment of Thyroid Function**

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## **Chapter (II)**

# **Effect of Medications on Thyroid Functions**

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## **Chapter (III)**

# **Role of Thyroid Functions in Critically Ill Patients**

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## **Chapter (IV)**

# **Treatment of Thyroid Disorders in Critically Ill Patients**

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# Summary

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# References

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# Arabic Summary

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# ***Effect of Altered Thyroid Function on Critically Ill Patients***

***Essay***

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