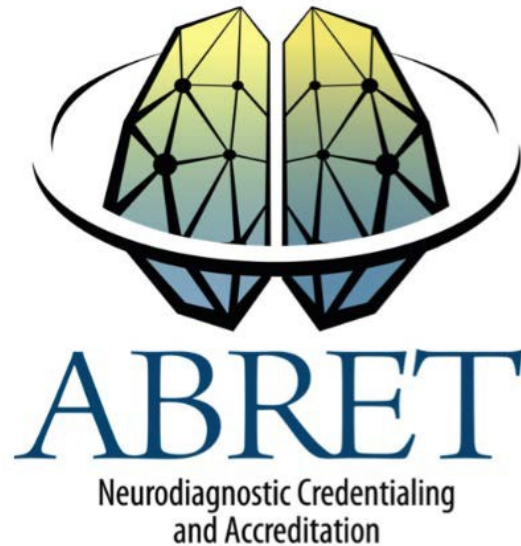


2027



**Handbook for Candidates
Certification for
NeuroAnalyst-CLTM
NA-CLTM**

ABRET Executive Office
111 E. University Drive., #105–355
Denton, TX 76209

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The Certification Examination for the NeuroAnalyst CLTM (NA-CLTM) is designed and written for the advanced level CLTM professional, who is currently practicing in a monitoring environment. Candidates will be expected to have been an active participant in the review of prolonged video-EEG cases.

This handbook contains necessary information about the NeuroAnalyst NA-CLTM examination.

Please retain it for future reference.

Candidates are responsible for reading these instructions carefully.

This handbook is subject to change – Please refer to the [ABRET website](#) for the most up-to-date information.

Quick Reference Guide

This section pulls together the information candidates ask about most: how to apply, what happens right after you apply, and what happens after you take the exam. This guide is a summary — full details, including required policies, are in the sections that follow.

How to Apply

- Read this handbook, especially the Content Outline, which is the blueprint for the exam.
- Go to abret.org, click EXAMS, and select Pathways & Application under NA-CLTM. Confirm you meet the requirements in the [Eligibility Chart](#) and gather your [documentation forms](#).
- Select “Apply” for your pathway ([Pathway I](#) or [Pathway II](#)) and log into your existing [ABRET Certemy account](#) — **do not create a new account**. If you do not remember your login, call ABRET at 217-726-7980.
- Enter your information, upload your eligibility documents, and pay the \$700 exam fee (most major credit cards are accepted). **Ensure checks clearly identify your name as an exam candidate.**

What Happens After You Apply

- **Eligibility review** — ABRET reviews your eligibility and application materials. When you reach “Eligible to Test,” you receive an instant email.
- **Scheduling Authorization** — The ABRET Executive Office (@abret.org) emails it in approximately 2–5 business days (not received in 1 week? Call 217-726-7980 or email tami@abret.org). Appointments are first come, first served — schedule right away.
- **In-person exam** — ABRET administers the exam on predetermined dates, times, and locations posted on the [ABRET NA-CLTM page](#). Bring a current driver’s license, passport, or US Military ID (temporary or paper IDs are not accepted) and arrive on time — late arrival may prevent you from testing.
- **Rescheduling** — Contact ABRET at 217-726-7980. The fee is \$225 at least 30 days before your appointment and \$300 inside 30 days. There are no refunds, extensions, or transfers of fees.
- **Accommodations** — The [Testing Accommodation Request Form](#) must be emailed to tami@abret.org before the final submission of the candidate’s application.
- **If you are denied eligibility** — You may appeal in writing to ABRET within 30 days.

What to Expect After You Take the Exam

- **Official results** — About 3–4 weeks after your exam date you receive an email when your OFFICIAL result is uploaded to your ABRET Certemy account. Please do not contact ABRET about results before then.
- **If you pass** — Your NA-CLTM certificate is available in the Digital Wallet of your Certemy account, you are listed on the ABRET website, and the credential is awarded for five years.
- **If you do not pass** — You get one exam attempt per application, so call ABRET at 217-726-7980 to reassign your application and repeat the online application steps. After three unsuccessful attempts, you must wait 6 months and submit 10 advanced practice CEUs.
- **Questions** — You may comment on any exam question right after the exam, or submit a written complaint to the ABRET Executive Director within 14 calendar days.

Introduction

ABRET is a nonprofit credentialing board. ABRET supports the concept of voluntary certification by examination for health care professionals in with advanced practice experience in reviewing and accurately describing EEG and long-term EEG patterns and associated clinical scenarios. The knowledge tested will relate specifically to identification of:

1. complex brainwave patterns including those that are subtle or difficult to recognize,
2. the clinical pictures associated with these patterns as appropriate to the patient's history and the current scenario,
3. the medications associated with these patterns or clinical scenarios (as related to treatment and as related to potential direct impact upon the patterns),
4. the recording techniques utilized to obtain the patterns and their impact upon the patterns, as well as the utilization of specific montages to enhance viewing of subtle aspects of the brainwave patterns,
5. environmental and other factors that may impact the EEG patterns in the ICU or other inpatient areas, in the home, and in outpatient testing locations.
6. The candidate will be tested on their critical thinking and communication skills as applied to advanced EEG pattern recognition for patients of age one (1) year and older, to provide preliminary findings of brainwave testing along with their clinical context, as appropriate, utilizing standardized 2021 ACNS and 2017 ILAE terminology.

KEY POINTS — what this section means for you

- ABRET establishes and measures the knowledge required for NA-CLTM certification through an objective, computer-based written examination.
- ABRET formally recognizes individuals who meet its eligibility requirements and pass the examination.
- Continued professional growth is required through mandatory continuing education and recertification.

Objectives of ABRET

TO ESTABLISH ADVANCED PRACTICE COMPETENCY IN PRELIMINARY INTERPRETATION OF EEG AND LONG-TERM EEG MONITORING BY:

1. Providing a standard of knowledge NeuroAnalyst long-term monitoring reader required for certification.
2. Establishing and measuring the level of knowledge required for certification in NeuroAnalyst long term monitoring reader by means of an objective, computer-based written examination.
3. Formally recognizing those individuals who meet the eligibility requirements of ABRET and pass the Certificate Examination in NeuroAnalyst Long Term Monitoring.
4. Encouraging continued professional growth in long term monitoring through mandatory continuing education and recertification.

Non Discrimination Statement

ABRET – Neurodiagnostic Credentialing & Accreditation does not discriminate on the basis of age, gender, race, religion, national origin, marital status, or handicapped condition.

Administration

The Certification Program is sponsored by ABRET. The Certification Examination for NeuroAnalyst-CLTM is administered as an in-person examination by ABRET.

Questions concerning the Certification for NeuroAnalyst-CLTM should be addressed to the ABRET Executive Office: 111 E. University Dr. #105-355, Denton, TX 76209 – (217) 726-7980 – www.abret.org or by email: Tami@abret.org

Fees

Application Fee for the Certification for NeuroAnalyst-CLTM.....\$700

The application fee will be paid online during the application process.

Rescheduling Fee 30 days prior to scheduled appointment\$225

Rescheduling Fee 30 days within scheduled appointment\$300

Rescheduling fee will be paid after confirmation from ABRET (see Changing Your Appointment)

THERE ARE NO REFUNDS, EXTENSIONS, nor TRANSFER OF FEES

2027 NA-CLTM Eligibility Chart

NeuroAnalyst-CLTM Pathway I – Bachelor's Degree:

1. ≥ Bachelor's Degree
2. 2 years as a CLTM technologist
3. 30 Advanced Practice LTM CEUs
4. Documentation of 50 technical reports
5. Current CPR/BLS certification

NeuroAnalyst-CLTM Pathway II – Practice Track* :

1. 3 years as a CLTM technologist
2. 50 Advanced Practice LTM CEUs
3. Documentation of 50 technical reports
4. Current CPR/BLS certification

* Continuation of the Practice Track will be evaluated annually.

The NA-CLTM credential is achieved upon successfully passing the NeuroAnalyst-CLTM Exam

The candidate must have reviewed long-term EEGs and composed technical reports. Technical report criteria must include display settings and an EEG description, must cover a minimum of one 12-hour period, and be written per the [2021 ACNS Terminology](#), the [2015 ACNS Consensus Statement on Continuous EEG in Critically Ill Adults and Children](#), and per [2017 ILAE Seizure Classifications](#).

1. Documentation of 50 LTM cases must be submitted with the application. The cases must represent unique EEG recording sessions (can be either 1 Daily report within a multi-day recording session or can be 1 summary report of a multi-day recording session; cannot be 3 Daily reports for one patient recording). [Documentation forms](#) are available on the ABRET website under NeuroAnalyst-CLTM Eligibility Requirements.
2. 50 cases must have been monitored within the last 5 years and are only counted after the candidate obtained his/her CLTM. Patients must be age 1 year or older at the time of recording.
3. Documentation forms will be randomly audited. Incomplete or incorrect information may delay or negate eligibility.
4. * [ABRET Advanced Practice CEUs](#) must be acquired within 5 years of taking the NA-CLTM exam (ASET, ACNS, AES, etc.). No more than half of the total required CEUs can be from in-house/remote review sessions verified through completion of the NA-CLTM Advanced Credential CEU Completion Form.

2027 NA-CLTM Eligibility Chart (continued)

5. After 3 unsuccessful attempts to pass the examination, the candidate will need to wait 6 months and submit 10 advanced practice CEUs.
6. The NA-CLTM credential is awarded for five years.
*Please refer to reference document [ABRET Advanced Practice LTM Continuing Education Qualifications](#).

Quick Tips Before Proceeding with the Application Process

- *Your name must match exactly with the name shown on current government-issued photo ID, such as a driver's license or passport. Do not use nicknames or abbreviations.
- *Documentation forms are available [on the ABRET website](#).
- *Have all required eligibility documents ready to be uploaded into your ABRET Certemy Account. *PDFs are best.
- *Retain copies of all uploaded documents for your records. *Keep this HANDBOOK for reference.

Application Procedure

Applications for ABRET examinations should be completed online through the ABRET website www.abret.org

- 1) Read the Handbook for Candidates and follow instructions.
- 2) Visit ABRET.org – click on **EXAMS** and select **Pathways & Application under NA-CLTM**. See the [NA-CLTM exam page](#).
- 3) Click on “Apply” and select your eligibility pathway to apply under. Go directly to the [Pathway I](#) or [Pathway II](#) application.
- 4) Log into your ABRET Certemy account. You already have an account as a CLTM credential holder. If you do not remember your login information, contact ABRET at 217-726-7980. Do not create a new account.
- 5) Complete the application by inputting your information and uploading your eligibility requirements including payment of the \$700 examination fee.
 - Most major credit cards are accepted.
 - Ensure Checks identify your name as an exam candidate and the ABRET exam you are applying for. Mail checks to: ABRET Executive Office – 111 E. University Dr., #105-355, Denton, TX 76209

Upon achieving the status of “**Eligible to Test**” an instantaneous email will be sent. Another email directly from the ABRET Executive Office (@abret.org) will be sent to schedule your exam appointment.

A denial of eligibility for certification may be appealed in writing and sent to ABRET within 30 days. See **APP-9** & **APP-10** of ABRET Examination Policies posted on the ABRET webpage [in the About Us page under Principles](#).

After exam results are uploaded into your ABRET Certemy account, proceed as directed:

[Pass Results](#): The **NA-CLTM** credential is awarded for five years. See information in [ABRET's Recertification webpage](#).

Application Procedure (continued)

[Fail Results](#): Candidates are provided one (1) exam attempt per application submission. Please contact ABRET to reassign your application at 217-726-7980 or by submitting a [Contact Us email](#). You will essentially need to repeat **ALL** steps of the online application process.

Candidates who do not pass the CLTM exam after 3 unsuccessful tries within a 2-year time frame will not be allowed to retest for 6 months and will be required to submit 10 LTM-related education credits.

* Please do not contact the ABRET office about your results until you receive your **OFFICIAL** test results.

You will not be able to reapply until the OFFICIAL test results are in.

Quick Tips Following the Application Process

*Candidates should retain copies of all uploaded documents submitted for eligibility requirements for your records.

*Application status will be PENDING until all steps of the application, including payment, are complete:

- If you paid by CHECK, your application will not be completed until payment is received.
- You may have been randomly selected for audit. You or your supervisor will be contacted by our auditor with any questions or instructions on how/when to proceed.

Scheduling Your Examination

Candidates cannot schedule an examination appointment until they have received an email from the ABRET Executive Office (@abret.org).

Scheduling Authorization will be emailed to candidates approximately 2-5 business days after the status of “Eligible to Test” is achieved. The Scheduling Authorization will indicate how to schedule your examination appointment as well as the dates during which testing is available. Appointment times are first come, first serve, so schedule your examination appointment as soon as you receive your Scheduling Authorization in order to maximize testing at your preferred location and on your preferred date.

If you do not receive a Scheduling Authorization within 1 week of achieving “Eligible to Test” status, contact ABRET at (217) 726-7980 or email tami@abret.org to resend your Scheduling Authorization email.

Current government-issued photo ID (driver’s license or passport) must be presented in order to gain admission to sit for the exam. **Temporary, paper driver's licenses are not accepted.** It is recommended to have a printed copy of the Scheduling Authorization as well as your appointment confirmation.

Arrival at the testing site at the appointed time is the responsibility of the candidate.

Plan for weather, traffic, parking, and any security requirements specific to the testing location.

Late arrival may prevent you from testing.

*It is highly recommended the candidate becomes familiar with the testing site’s location prior to appointment.

Changing Your Examination Appointment

To reschedule current examination appointment please contact the ABRET Executive Office at (217) 726-7980

Rescheduling Fees:

≥ 30 days prior to the scheduled appointment.....	\$225
<30 days prior to the scheduled appointment.....	\$300

ABRET will provide you with an email confirmation of rescheduling and fee payment instructions.

THERE ARE NO REFUNDS, EXTENSIONS, nor TRANSFER OF FEES

Special Accommodation Requests

ABRET complies with the Americans with Disabilities Act (ADA) and will provide reasonable and appropriate accommodations in accordance with the ADA for individuals with documented disabilities who request and demonstrate the need for accommodation. ADA regulations define a person with a disability as someone with a physical or mental impairment that substantially limits one or more major life activities. ABRET requires documentation to validate the type and severity of a disability to enable accommodations to be specifically matched with the identified functional limitation in order to provide equal access to examination functions for all examinees. The information you provide and any documentation regarding your disability and test accommodation is confidential and is not included in scoring or reporting.

All approved testing accommodations must maintain the psychometric nature and security of the examination. Accommodations that fundamentally alter the nature or security of the exam will not be granted. Note that accommodation for an examination (test accommodation) may not be the same as accommodations provided by your employer for your job. You can find more information about testing accommodations under the Americans with Disabilities Act (www.ada.gov).

The [Test Accommodation Request Form](#) must be emailed to tami@abret.org before the final submission of the candidate's application. Missing information or incomplete Forms will result in a delay in processing.

To request test accommodations, complete the following steps:

1. Download the [Test Accommodation Request Form](#).
2. Complete Test Accommodations Form with your doctor/healthcare professional.
3. Email the Form and supporting documents to tami@abret.org before the final submission of the candidate's application. Missing information or incomplete Forms will result in a delay in processing.

If your Form is incomplete and/or not received at least 8 weeks before the start of the testing period, we cannot guarantee that we can make these test accommodations in time for you to test. Therefore, your application may need to be reprocessed for another testing period, and you would need to pay the reprocessing fee.

****Accommodations cannot be added to an existing exam appointment****

KEY POINTS — what this section means for you

- By applying, you certify your application is true and complete and agree to follow all ABRET policies, including the Code of Ethics and Disciplinary Policy.
- Notify ABRET of any change in your name, address, phone number, or email, and of developments affecting your certification.
- Exam materials are confidential — you may not copy, keep notes on, or share exam content.
- ABRET may deny, suspend, or revoke certification for rule violations.

Application Agreement

- 1. Application.** I certify that all the information contained in my application is true and complete to the best of my knowledge. I hereby authorize ABRET and its officers, directors, employees, and agents (collectively, “ABRET”) to review my application and to determine my eligibility for certification.
- 2. Compliance with ABRET Rules.**
 - A.** I have read and agree to abide by ABRET’s policies and procedures, including but not limited to those listed below. I will read and keep up to date with these rules.
 - i. Handbook for Candidates (including the Code of Ethics and Disciplinary Policy);
 - ii. Use of Credential and Trademark Policy; and
 - iii. ABRET Examination Policies.
 - B.** I agree that ABRET may take action regarding my application, examination, or certification in accordance with its Disciplinary Policy, and that the penalties for violation of an ABRET rule include (but are not limited to) denial, revocation, or limitation of my certification.
 - C.** As specified within the Disciplinary Policy, I agree to notify ABRET of any change in name, address, telephone number, or email address, and of any development bearing on certification such as (but not limited to) suspension, revocation, or expiration of a state license to practice, being sued by a patient, or being investigated or reprimanded by a state regulatory board.
- 3. Cooperation.** I agree to cooperate promptly and fully in any review of my application, examination(s), or certification, and I agree to submit any additional information requested.
- 4. Examination Confidentiality.** I am seeking admission to take the examination(s) for the purpose of pursuing certification, and for no other purpose. Because of the confidential nature of the examination(s), I agree to not make or keep copies, excerpts, or notes of examination materials, and to not use or divulge information learned from the examination(s). The examination(s) is/are the exclusive property of ABRET, and I will not use examination information in any way without the express prior written consent of ABRET.
- 5. Examination Administration.**
 - A.** I agree to abide by ABRET’s reasonable rules regarding examination administration. ABRET may refuse my admission to an examination if I do not have the proper identification (valid photo ID and eligibility notice), or if administration has begun. The proctors may take steps as they believe necessary to maintain a secure and proper examination administration, including (but not limited to) relocating me before or during the examination.
 - B.** If I am refused admission or fail to appear at the examination site, or if my examination performance is voided based upon my behavior, I agree that I will not receive a refund of the application or examination fees and there will be no credit for any future examination.

Application Agreement (continued)

C. I understand that review of the adequacy of examination materials will be limited to computing accurate scoring; I hereby waive all further claims of examination review.

D. I acknowledge that ABRET is concerned with reporting only valid scores. I agree that ABRET may cancel an examination score if there is adequate reason to question its validity because of misconduct or other circumstances.

E. A passing score is required for credentialing in all instances.

6. Continuing Compliance. I understand and agree that it is my responsibility to maintain and demonstrate continuous compliance with all ABRET policies and procedures.

7. Certification Marks.

A. The NeuroAnalyst Long-Term Monitoring credential and the stylized “NA-CLTM” logo are the sole and exclusive property of ABRET and are subject to all applicable trademark and other rights of ABRET as owner under United States intellectual property law and international conventions. I agree to abide by ABRET’s instructions regarding use of its intellectual property, and to not use this intellectual property in any way without the express prior written consent of ABRET.

B. I agree to correct at my own expense any inaccurate or unauthorized use by me of ABRET’s credential and logo. I agree that if I refuse to make corrections, then ABRET is entitled to obtain all relief permitted by law, including but not limited to injunctive relief to enforce its rights with respect to the protection of its name, credential, logo, and other intellectual property.

8. Information Release. I agree that ABRET may release information regarding my application and certification record to state and federal authorities, licensing boards, employers, and others. This information includes (but is not limited to) ABRET’s findings regarding review of my application, fraudulent statements made by me, information indicating noncompliance with laws or regulations or with policies of other organizations, and the pendency or outcome of disciplinary proceedings.

9. Duration of Credential. This Application Agreement will become effective as of the date of acknowledgement upon submitting my application and will remain in effect for the duration of my application review. If I am granted certification, the terms of this Application Agreement will automatically continue in effect for the duration of my credential. I acknowledge and agree that initial credential is awarded only for a five (5) year period, and that completion of recertification requirements, recertification applications, and reviews will be required to maintain my credential.

10. Waiver of Claims & Indemnification.

A. I hereby waive all claims against ABRET arising out of my application and my participation in the certification program, including (but not limited to) claims arising out of (i) any release of information to state and federal authorities, licensing boards, employers, and others, and (ii) any investigation and review of my application and certification by ABRET. If ABRET is required by law to disclose confidential information, the individual(s) whose information is released will be notified to the extent permitted by law.

B. I agree to indemnify ABRET for any third-party claims arising out of any action taken pursuant to the policies and procedures of ABRET with regard to my application, the examination, or my certification. In addition, I agree to indemnify ABRET for any third-party claims arising out of my professional practice and related activities.

Application Agreement (continued)

- C. The provisions of this Waiver of Claims & Indemnification section do not extend to claims based on the gross negligence or willful misconduct of ABRET.
- D. My obligations and rights and those of ABRET under this Waiver of Claims & Indemnification section will survive beyond the termination or expiration of my certification and remain in full force and effect.

11. Governing Law & Venue. This Agreement is governed exclusively by the laws of the State of Texas, without reference to its choice of law doctrine. The parties agree that the sole jurisdiction and venue for any litigation arising from this Agreement is the appropriate federal court for the Eastern District of Texas or state court located in Denton County, Texas. If a dispute arises, the parties shall make a good faith attempt to resolve the dispute through dialogue and negotiation prior to pursuing court action.

Upon submitting the application for “NA-CLTM” you will be asked to acknowledge that you have read and understand this Application Agreement and agree to its terms in consideration for the opportunity to seek certification from ABRET.

Information Release: If granted certification, you will be authorizing ABRET to release your name and the fact that you have been granted certification to newspapers and other publications, and to release your name, employment information, address, and email address in ABRET’s online directory and mailing list. You may opt out of this process by notifying the ABRET office in writing.

Examination Administration

The Certification for NeuroAnalyst is administered by ABRET on [predetermined dates, times, and locations posted on the ABRET website](#).

KEY POINTS — what this section means for you

- Bring a current driver’s license, passport, or US Military ID — temporary or paper IDs are not accepted.
- No electronic devices (including smart watches), papers, books, calculators, rulers, or reference materials may be taken into the testing room.
- You cannot leave the testing room during your exam; breaking a rule can mean forfeited fees, dismissal from testing, and canceled scores.

Rules for Examination

Please read the information below carefully. You are responsible for adhering to the examination rules while at the testing center.

1. You must present your current driver’s license, passport, or US Military ID at the testing center. Candidates without valid ID will NOT be permitted to test. Temporary or paper copies of your ID will not be accepted.
2. No Electronic devices that can be used to record, transmit, receive, or play back audio, photographic, text, or video content, including but not limited to, cell phones, laptop computers, tablets, Bluetooth devices; wearable technology (such as smart watches), MP3 players (such as iPods), pagers, cameras, and voice recorders are permitted to be used and cannot be taken in the examination room. Watches and “Fitbit” type devices cannot be worn during the examination.

Rules for Examination (continued)

3. No papers, books, calculators, rulers, or reference materials may be taken into or removed from the testing room. Upon request a candidate will be provided either a scratch piece of paper, tablet, or whiteboard.
4. No questions concerning content of the examination may be asked during the examination session. The candidate should listen to the instructions given by the Examiner and read the instructions provided on the computer screen.
5. Test documents and notes must remain in the examination room. Removing any test material by any means is prohibited.
6. No questions concerning content of the examination may be asked during the examination. The candidate should listen to the instructions given by the Examiner and read the instructions provided on the computer screen.
7. Anyone giving or receiving assistance of any kind will have the computer-based testing terminated and be asked to leave the room.
8. Visitors are not permitted in the examination room.
9. ABRET prohibits certain behaviors, including but not limited to the activities listed below:
 - a. Copying test questions
 - b. Copying answers
 - c. Permitting another to copy answers
 - d. Falsifying information required for admission to an examination
 - e. Impersonating another examinee
 - f. Taking the examination for any reason other than for the purpose of seeking accreditation
10. Complaints and challenges must be submitted in writing within 14 days after taking the examination. ABRET will not consider late submissions. The procedure for submitting complaints and challenges is contained in the ABRET policy on examination challenges located on the ABRET website.
11. Candidates are prohibited from leaving the testing room while their examination is in session.
12. Bulky clothing, such as sweatshirts (hoodies), jackets, coats, and hats, except hats worn for religious reasons, may not be worn while taking the examination.

VIOLATION OF ANY OF THE RULES LISTED ABOVE MAY LEAD TO FORFEITURE OF FEES, DISMISSAL FROM THE TESTING ROOM, AND CANCELLATION OF YOUR TEST SCORES.

Quick Tips Before Examination Day

*You will not be able to schedule your examination appointment until you have received an email from the ABRET Executive Office (@abret.org).

*It is highly recommended the candidate becomes familiar with the testing site's location prior to your appointment.

*This Handbook provides the Content Outline for the Examination. Use it to help guide your study in preparing for the examination.

KEY POINTS — what this section means for you

- This is the blueprint for the exam — use it as your study guide.
- Weighting: Patient information and history 5%, Technical description and recording parameters 5%, Analyzing, classifying, and annotating EEG and video data 70%, Writing the NeuroAnalyst Report 20%.

Neuro-Analyst-CLTM Exam Content Outline

I. Validate patient identification and recording period, review the patient history and clinical data and information. (5%)

- A. Indications for LTM, ICU Monitoring and Ambulatory EEG
- B. Elements of a history/Neuro exam
- C. Medical/EEG terminology
- D. Neuroimaging
- E. Age-specific criteria
- F. Neuropathology & Comorbidities (e.g., neurologic disorders, head trauma, cardiac, anoxic)
- G. Effects of drugs
- H. Other devices (indwelling/external)
- I. Culture of safety (e.g., fall risks, restraints)

II. Review the technical description and recording parameters. (5%)

- A. 10-10 and 10-20 electrode placement & electrode types
- B. Montage modifications
- C. Effects of instrument settings (e.g., filters, display gain, epoch, differential amplifier, polarity, CMRR)
- D. Digital analysis and instrument concepts (e.g., trending, spike & seizure detection, post-acquisition review)
- E. Computer knowledge related to LTM devices and networks, Audio-video Technology.
- F. ACNS Guidelines

III. Analyze, classify, annotate, and delineate the EEG and video data, and evaluate seizure semiology based upon clinical and electrographic findings. (70%)

- A. Electrographic changes requiring provider notification (Critical Value)
- B. Activation Procedures
- C. Artifact monitoring, identification, and elimination
- D. Waveform identification & Localization techniques
- E. Basic cardiac rhythms and rhythms associated with EEG changes
- F. Significant patient behaviors and clinical events (e.g., changes in level of consciousness, body movements, episodes)
- G. Seizure semiology and correlated EEG/clinical findings, Standardized nomenclature

IV. Write the NeuroAnalyst Report. (20%)

- A. Classification of EEG patterns
- B. ILAE Operational Classification of Seizure Types & the Epilepsies (focal, generalized, motor, non-motor, tonic, atonic, syndromes, etc.)
- C. ACNS Standardized Critical Care EEG Terminology
- D. ACNS Consensus Statement on Continuous EEG in Critically Ill Adults and Children.
- E. Electrographic patterns-associated syndromes seen in patients one year and older.
- F. ACNS Guideline

References

The following references, or most recent editions of the following, may be useful in preparing for the examination. The list does not attempt to include all acceptable material, nor is it suggested that the NeuroAnalyst-CLTM exam is necessarily based on these references.

- American Clinical Neurophysiology Society Guideline for Long-Term Monitoring in Epilepsy, Guideline 12, 2008. (www.acns.org)
- American Clinical Neurophysiology Society Guideline on Continuous EEG in Critically Ill Adults and Children, Part I: Indications (https://www.acns.org/UserFiles/file/Consensus_Statement_on_Continuous_EEG_in.1.pdf), 2015
- American Clinical Neurophysiology Standardized Critical Care EEG Terminology, **2021 Version***. Guideline 14. (https://journals.lww.com/clinicalneurophys/Fulltext/2021/01000/American_Clinical_Neurophysiology_Society_s.1.aspx)
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- Tatum, W.O. IV. Ambulatory EEG Monitoring. Demos, 2017.
- Tatum, W.O. IV. Atlas of Artifacts in Clinical Neurophysiology. Demos, 2018
- Yamada T, Meng E. Practical Guide for Clinical Neurophysiologic Testing: EEG. Lippincot, Williams & Wilkins, 2017.

Additional reference materials may be obtained by contacting ASET – The Neurodiagnostic Society, www.aset.org.

Scoring

The Board set the passing standard as the number of test questions it determines to be necessary for candidates to answer correctly in order to be considered at least minimally competent. This method focuses on the particular test that is being administered. Different forms of an examination are matched for difficulty and content coverage. This comprehensive approach makes use of information about the performance of similar groups in the past.

ABRET is concerned with reporting only valid scores. On rare occasions, misconduct or circumstances beyond the individual's control may render a score invalid. If doubts are raised about a score because of these or other circumstances, ABRET reserves the right to cancel any examination score if, in the sole opinion of ABRET, there is adequate reason to question its validity.

Report of Results

Approximately 3-4 weeks following examination date, candidates will receive an email when the **OFFICIAL** test result has been uploaded into their ABRET Certemy account. Scores on the major areas of the examination and on the total examination will be reported and emailed to the candidates. Passing candidates will have access to their NA-CLTM certificate in the Digital Wallet of their Credential Manager (i.e., Certemy account) and will be listed on the ABRET website.

* Please do not contact the ABRET office about your results until you receive your **OFFICIAL** test results. You will not be able to reapply until the OFFICIAL test results are in.

KEY POINTS — what this section means for you

- Comment on any question right after the exam, or file a written complaint within 14 calendar days.
- Exam materials are not available for candidate review.

Examination Challenges

Candidates may comment in the appropriate section at the end of the examination about any test question or questions, test procedure, and/or the test itself. Alternatively, a candidate may submit a complaint in writing to the ABRET Executive Director no later than fourteen (14) calendar days after taking the examination. All challenges and complaints will receive ABRET's full attention. Comments regarding examination validity will be reviewed by the ABRET examination committee. Examination materials shall not be available for review by candidates.

Confidentiality

1. ABRET will release the individual test scores **ONLY** to the individual candidate.
2. Occasionally, it may be necessary for the ABRET Executive Office and Board of Directors to disclose candidate information and/or scores. No material or information disclosed will be released to any unauthorized person.
3. ABRET provides ASET – The Neurodiagnostic Society with the names, addresses, and emails of passing candidates. Candidates may opt out by contacting ABRET.

Attainment of Credential

Eligible candidates who pass the Certification Examination for NeuroAnalyst-CLTM will be certified for a period of five years and will be authorized to use the NA-CLTM designation, subject to compliance with ABRET's Code of Ethics, rules, policies, and procedures, and standards of practice of ABRET. They will receive a digital Certificate and be eligible for recertification after five years. If not recertified, they will no longer be permitted to use the NA-CLTM designation.

Quick Tips After Achieving Your Credential

* It is important for ABRET to maintain your correct name and contact information. Please promptly notify the ABRET Executive Office of an address and/or name change by completing [ABRET's name and address change form](#).

Although it is your responsibility to know when your credential expires, we will remind you via email through your ABRET [Certemy account](#) when your credential needs to be renewed.

Please make sure your ABRET Certemy account is up to date.

KEY POINTS — what this section means for you

- The Code of Ethics and Grounds for Disciplinary Action define the conduct required to earn and keep an ABRET credential.
- Falling short of these standards can lead to suspension or revocation of your certification.

Purpose of Standards

ABRET has developed the *Code of Ethics* and the Grounds for Disciplinary Action to articulate standards of conduct required for eligibility of ABRET credentials, microcredentials, and continued credentialing of EEG, EP, CNIM, CLTM, CAP, CMEG, and NA-CLTM technologists. Maintenance of board certification will require adherence to these and other ABRET rules. Individuals who fail to meet these requirements may have their certification suspended or revoked.

ABRET does not guarantee the job performance of any individual.

KEY POINTS — what this section means for you

- Put patients first: dignity, confidentiality, safety, and freedom from discrimination.
- Stay current, practice competently and objectively, and don't take primary responsibility for interpreting EEG, EP, or IOM studies unless you're licensed or otherwise authorized to do so.
- Be honest and cooperative with ABRET, and follow all ABRET rules.

Code of Ethics & Standards of Practice

ABRET is a nonprofit credentialing board for Electroencephalographic (EEG) Technologists, Evoked Potential (EP) Technologists, Neurophysiologic Intraoperative Monitoring (CNIM) Technologists, Long Term Monitoring (CLTM) Technologists, Autonomic Professionals (CAP) and Magnetoencephalography (CMEG), NeuroAnalyst Long Term Monitoring (NA-CLTM) Technologist, and related microcredentials, and seeks to encourage, establish, and maintain the highest standards, traditions and principles of these technologies. ABRET Registered and Certified Technologists should recognize their responsibilities, not only to their patients, but also to society, to other healthcare professionals, and to themselves.

The following principles have been adopted by the Board of Directors in order to encourage personnel to aspire to the highest possible professional practice. An ABRET Registered technologist or Certified individual shall:

1. Do everything in his or her power to ensure that the current Guidelines of the American Clinical Neurophysiology Society are complied with in the department in which he or she works.
2. Preserve human dignity, respect patient's rights, and support the wellbeing of the patient under his or her care. The Registered or Certified technologist shall avoid discrimination against individuals on the basis of race, creed, religion, sex, age, and national origin.
3. Appreciate the importance of thoroughness in the performance of duty, compassion with patients, and the significance of the task he or she performs.
4. Preserve the confidentiality of medical and personal information of a patient.
5. Strive to remain abreast of current technology and to study and apply scientific advances in his or her specialty. Carry out his or her professional work in a competent and objective manner.
6. Abide by laws related to the profession and to general public health and safety and avoid dishonest, unethical, or illegal practices.

Code of Ethics & Standards (continued)

7. Refuse primary responsibility for interpretation of testing or monitoring of Electroencephalograms, Evoked Potentials, or Neurophysiologic Intraoperative Monitoring for purposes of clinical diagnosis and treatment. Individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded.
8. Be truthful, forthcoming, and cooperative in his or her dealings with ABRET.
9. Be in continuous compliance with ABRET's rules (as amended from time to time by ABRET).
10. Respect ABRET's intellectual property rights.
11. Upon suspension or withdrawal of certification, the certificant shall discontinue the use of all claims to certification that contain any reference to ABRET.

KEY POINTS — what this section means for you

- Certain criminal convictions can make you ineligible for certification.
- Discipline can result from fraud, cheating, misuse of ABRET credentials, or failing to report changes.
- Sanctions range from reprimand to denial, suspension, or revocation; you may appeal in writing within 30 days.

Violations Reporting Requirements

If conduct has occurred that may be grounds for disciplinary action under the Violations to Standards of Practice and Disciplinary Process policy, then ABRET may place an application on hold while reviewing the matter. These will be reviewed on a case-by-case basis.

A criminal conviction may be grounds to deny or otherwise limit eligibility. Convictions of this nature include (but are not limited to) felonies involving rape, sexual abuse of a patient or child, and actual or threatened use of a weapon or violence. If a conviction resulted in a sentence that includes incarceration, then the individual is ineligible while in confinement (RUL-26).

1. **Grounds for Disciplinary Action.** ABRET may deny, suspend, revoke, or take other action regarding an application or certification if an individual is not in compliance with this Disciplinary Policy. Grounds for disciplinary action include (but are not limited to):
 - A. Ineligibility for certification, regardless of when the ineligibility is discovered;
 - B. An irregular event in connection with an ABRET examination including (but not limited to) copying answers, copying examination materials, and causing a disruption in the testing area;
 - C. Providing fraudulent or misleading information;
 - D. Unauthorized possession or misuse of ABRET credentials, examinations, and other intellectual property;
 - E. Misrepresentation of certification status
 - F. Failure to provide requested information in a timely manner;
 - G. Failure to inform ABRET of changes or adverse actions;
 - H. Gross negligence or willful misconduct in professional work;
 - I. Accepting primary responsibility for interpretation of testing or monitoring for purposes of clinical diagnosis and treatment (Individuals who are licensed or otherwise authorized by practice standards to provide interpretation are excluded.);

Violations Reporting Requirements (continued)

- J. Failure to maintain a current professional credential as required by the jurisdiction in which the individual practices (this may include a license, certificate, or registration);
- K. The conviction of, plea of guilty to, or plea of no contest (“nolo contendere”) to a felony or misdemeanor related to public health and safety or the profession;
- L. Disciplinary action by a licensing board or professional organization other than ABRET; and
- M. Other failures to maintain continuous compliance with ABRET standards, policies, and procedures.

2. Sanctions.

- A. ABRET may impose one or more of the following sanctions for a violation of this Disciplinary Policy:
 - Denial or suspension of eligibility;
 - Denial of certification;
 - Revocation of certification;
 - Non-renewal of certification;
 - Suspension of certification;
 - Reprimand;
 - Probation;
 - Notification of other legitimately interested parties;
 - Or other corrective action (RUL-8).

Candidates or certificants may appeal the decision of the Ethics and Disciplinary Committee by submitting a written appeals statement within 30 days, according to ABRET’s policies.

Each candidate must affirm that the information provided in the Application is true and correct to the best of their knowledge. Each candidate further agrees to hold ABRET and its sponsoring organizations blameless from any claim for damages as a result of any action it may take in connection with this Application, the credentialing examination, or the results there of.