CARDIOVASCULAR & CARDIOMETABOLIC RISK

PHARMACOTHERAPY REFERENCE GUIDE

AHA Expert Consensus Recommendations[9]

1. **Recognize** the risk of hypertension and CV/cardiometabolic disease in patients with NT
2. **Reduce** the risk of hypertension and CV/cardiometabolic disease in patients with NT
3. **Reduce** sodium intake to lower the risk of HTN and CVD in patients with NT

Monitoring Checklist

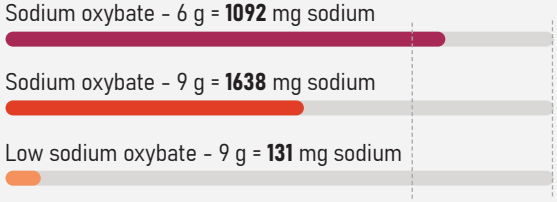
- ❑ Blood pressure
- ❑ Weight/BMI
- ❑ Waist circumference
- ❑ Lipids
- ❑ HbA1c/glucose
- ❑ OSA screening
- ❑ Sodium intake
- ❑ DASH/heart-healthy diet
- ❑ Exercise
- ❑ Smoking cessation
- ❑ Sleep optimization
- ❑ Renal function, when clinically indicated

Sodium Pearls[10,11]

DAILY SODIUM EXPOSURE

- WHO recommendation:≤2,000 mg/day
- AHA ideal target:~1,500 mg/day

OXYBATES, SODIUM EXPOSURE



Treatment Strategy by Outcomes[12]

TARGETS	EDS	CATAPLEXY	EDS + CATAPLEXY
AGENT(S)	LXB	LXB	LXB
	Sodium oxybate (& ER)	Sodium oxybate (& ER)	Sodium oxybate (& ER)
	Solriamfetol	Pitolisant	Pitolisant
	Modafinil/ Armodafinil	Tricyclic antidepressant	Atomoxetine
	Methylphenidate	SSRI	
	Pitolisant	Atomoxetine	
	Dextroamphet-amine	Venlafaxine	
	Atomoxetine		

■ FDA-approved indication
■ Off-label

Cardiovascular Considerations[13-16]

Agent	Warning
Modafinil/ Armodafinil	Increased monitoring for CVD
Methylphenidate	Serious CV events and increased monitoring for BP and HR
Dextroamphetamine	Potential for increased risk of cardiac events and death if history of MI or angina
Solriamfetol	Increased monitoring for BP and HR
Sodium oxybate	High sodium content; increased monitoring in patients with HF, HTN, or impaired renal function
Pitolisant	Prolongs QT interval, increases risk of arrhythmia; avoid in patients with hepatic or renal impairment

EXCHANGE CME™
INTEGRITAS COMMUNICATIONS

NARCOLEPSY

A Clinician's Pocket Guide

Diagnosis, Functional Burden, Cardiovascular Risk, and Individualized Pharmacotherapy

CLINICAL RECOGNITION & DISEASE BURDEN

Core Symptoms[1]

- Excessive daytime sleepiness (EDS)
- Sleep attacks/ involuntary naps
- Hypnagogic/ hypnopompic hallucinations
- Disrupted nighttime sleep
- Cataplexy
- Sleep paralysis
- Cognitive dysfunction/"brain fog"

Frequently Associated Conditions[1]

- ✔ Depression/Anxiety
- ✔ ADHD
- ✔ Obesity/Weight Gain
- ✔ Migraine/Headaches
- ✔ Other Sleep Disorders (OSA, Parasomnias, Restless Legs Syndrome)

FUNCTIONAL IMPACT CHECKLIST

- ❑ Driving Impairment
- ❑ Social Withdrawal
- ❑ Work/School Dysfunction
- ❑ Falls/Injury from Cataplexy
- ❑ Cognitive Impairment
- ❑ Reduced QoL
- ❑ Emotional Distress
- ❑ Fatigue

DIAGNOSTIC WORKUP AND TESTING

Evaluation Checklist[2,3]

- ❑ Review of symptoms (ROS)
- ❑ Excessive daytime sleepiness (EDS) ≥3 months
- ❑ Presence of cataplexy, sleep paralysis, hallucinations, and disrupted nighttime sleep
- ❑ Validated assessment tools, eg, Epworth Sleepiness Scale (ESS), Functional Outcomes of Sleep Questionnaire (FOSQ-10), Narcolepsy Severity Scale (NSS)
- ❑ Assess comorbid medical or psychiatric conditions
- ❑ Screen for other sleep disorders, including OSA
- ❑ List current medications, drug use, and associated side effects

Pretest Preparation (1 to 3 weeks prior)[2,3]

- ❑ Actigraphy or sleep log for 1 to 2 weeks
- ❑ Ensure adequate nighttime sleep prior to testing
- ❑ Discontinue medications or drugs that increase alertness or suppress REM, eg, antidepressants, stimulant drugs (amphetamines, cocaine), caffeine

Overnight PSG

- ❑ Evaluates sleep quantity and quality
- ❑ Rules out other disorders
- ❑ Measures sleep-onset REM-sleep periods (≤15 mins is a clinical marker for NT)

Daytime MSLT

- ❑ Measures mean sleep latency and SOREMPs
- ❑ Performed the day after PSG
- ❑ 5 scheduled naps every 2 hours; patient allowed to sleep for ≥20 mins

Limitations on testing include poor reproducibility, high false-negative rates, confounding results from REM-suppressing medications, altered interpretation from insufficient sleep or other comorbidities

NARCOLEPSY CRITERIA

ICSD-3-TR[2,3]

Narcolepsy Type 1 (NT1)

In addition to EDS, the presence of at least one of the following:

1. Cataplexy and either:
   a. Mean sleep latency of ≤8 minutes and two or more SOREMPs on MSLT
   b. A SOREMP (≤15 minutes of sleep onset) on nocturnal PSG
2. CSF hypocretin ≤110 pg/mL or <⅓ of mean values obtained in normal subjects with the same standardized assay

Narcolepsy Type 2 (NT2)

In addition to EDS and criteria "a" above, the following must be met:

1. Absence of cataplexy
2. CSF hypocretin not measured or >110 pg/mL or >⅓ of mean control values
3. Hypersomnolence and/or MSLT findings not better explained by other causes

NT1 vs NT2 vs IH[4,5]

Features	NT1	NT2	IH
EDS	Yes	Yes	Yes
Cataplexy	Yes	No	No
Orexin deficiency	Yes	No	No
Nocturnal sleep	Fragmented	Long sleep times may be present; few awakenings	Long sleep times present; few awakenings
Naps	Short and restorative	Variable	Long but unrefreshing
Sleep inertia	Less common	Variable	Common
MSLT	≤8 mins	≤8 mins	≤8 mins
SOREMPs	≥2	≥2	≤1
REM	Greatly associated	Less associated	Not associated

FUNCTIONAL AND SLEEPINESS SCALES

Epworth Sleepiness Scale[6]

How likely are you to doze off or sleep in the following situations?

Situation	Chance of dozing or sleeping 0	1	2	3
Sitting and reading	❑	❑	❑	❑
Watching TV	❑	❑	❑	❑
Sitting inactive in a public place	❑	❑	❑	❑
As a passenger in a car for an hour without a break	❑	❑	❑	❑
Lying down to rest when circumstances are permitted	❑	❑	❑	❑
Sitting and talking to someone	❑	❑	❑	❑
Sitting quietly after lunch without alcohol	❑	❑	❑	❑
In a car, while stopped for a few minutes in traffic	❑	❑	❑	❑
Total Score (0-24):				

Score Interpretation:
Scores of **11-24** represent increasing levels of EDS

Narcolepsy Severity Scale[7]

Evaluates impact of narcolepsy symptoms over the past month.

- ❑ EDS
- ❑ Sleep paralysis
- ❑ Cataplexy
- ❑ Hallucinations
- ❑ Disrupted nighttime sleep

Higher score = greater severity

Functional Outcomes of Sleep Questionnaire (FOSQ-10)[8]

Assesses the impact of sleepiness on:

Productivity | Vigilance | Social Outcomes | Activity Level | Intimacy/Sexual Relationships

Lower score = greater functional impairment

For Validated Assessment Tools, References, and Links to Additional Resources, Visit Our Narcolepsy Clinical Resource Center at ExchangeCME.com/NarcolepsyCRC