PRESCRIPTION MONOGRAPH

Compounded Active Ingredients: NAD+
Form: Injection

Drug Class:

- Nicotinamide adenine dinucleotide (NAD+) is recognized as a vital coenzyme present in all living cells

---

Mechanism of Action[1,2]**:** NAD^+ is a coenzyme is potential applications central to cellular metabolism. It is intended to function as an electron carrier in redox reactions and plays a critical role in:

- ATP production via mitochondrial oxidative phosphorylation
- DNA repair (through activation of PARP enzymes)
- Sirtuin activation, influencing aging, inflammation, and metabolic regulation
- Neurotransmitter modulation, especially in detox and neurodegenerative pathways

When administered, NAD^+ can replenish intracellular stores, enhance mitochondrial function, and support cellular repair.

Indications Commonly Prescribed For:

- Treatment of pellagra (severe niacin deficiency)
- Adjunctive treatment in substance use detox (alcohol, opioids, etc.)
- Anti-aging and longevity protocols
- Cognitive enhancement and neurodegenerative disorders (e.g., Alzheimer's)
- Chronic fatigue syndrome, fibromyalgia
- Athletic recovery and cellular repair

Before Use: Let your doctor know if you have had any allergic reactions to injections in the past. Let your health care provider know if you are pregnant or breast feeding. Let your healthcare provider know of all supplements you are currently taking.

Contraindications:

- Hypersensitivity to NAD^+ or formulation excipients
- Use cautiously in individuals with active gout (may increase uric acid)
- Not recommended during acute severe illness without supervision

---

Cautions: Take care when injecting the compounded preparation into only specified areas from your health care provider. Check the vial before use for any cloudiness or discoloration before use.

How to Use This Medication: This medication is a subcutaneous injection and is delivered in a premixed liquid form. Wash your hands with soap and water before giving the injection. Wipe the rubber stopper of the vial with an alcohol swab. Take a syringe and pull the plunger down to the necessary prescribed amount. This is achieved when the plunger reaches the line for the amount prescribed. Push the needle through the rubber stopper of the vial. Push the plunger down to put air into the vial. Invert the vial and then slowly pull the plunger down past the prescribed dose. If there are bubbles in the syringe, tap the syringe to allow the air bubbles to rise to the top. Slowly push the plunger up until the tip reaches the line for the prescribed dose and removes the bubble of air. Pull the syringe out of the vials rubber stopper. Inject at predetermined injection site as instructed by healthcare practitioner. Discard any remainder from punctured vial after 28 days.

PRESCRIPTION MONOGRAPH

Warnings and Precautions:

- Electrolyte disturbances possible with prolonged use
- Limited safety data in pregnancy and lactation

Adverse Reactions:

Common:

- Nervousness
- Sleep disturbances
- Fatigue

Serious:

- Hypotension (from vasodilation)
- Bradycardia (if infused too rapidly)
- Allergic reaction (rare)

Interactions:

- No known major drug interactions
- May theoretically interact with chemotherapeutics that rely on redox mechanisms
- Oral niacin/nicotinamide should be spaced from NAD^+ to reduce GI effects

Use in Specific Populations:

- Pregnancy & Lactation: Not enough evidence; avoid unless prescribed
- Pediatrics: Safety not established
- Elderly: Well-tolerated in wellness protocols, but monitor comorbidities

Storage:

- Refrigerate at 2°C to 8°C (36°F to 46°F)
- Can be stored at room temperature (up to 30°C or 86°F) for up to 48hrs
- Do not freeze

Monitoring Parameters:

- Consider pre- and post-treatment electrolyte and liver function labs in high-dose regimens
- Clinical assessment of fatigue, cognition, or detox symptoms if applicable

Citations:

1. Conlon NJ. The Role of NAD+ in Regenerative Medicine. Plast Reconstr Surg. 2022 Oct 1;150(4 Suppl):41S-48S. doi: 10.1097/PRS.0000000000009673. Epub 2021 Sep 28. PMID: 36170435; PMCID: PMC9512238
2. Gindri, Izabelle de Mello Ferrari, Gustav Pinto, Luiz Paulo S. Bicca, Juliana dos Santos, Isis Kelly Dallacosta, Darlan Roesler, Carlos Rodrigo de Mello Evaluation of safety and effectiveness of NAD in different clinical conditions: a systematic review 2024 American Journal of Physiology-Endocrinology and Metabolism E417-E427 326