

Guiding Principles: People with chronic kidney disease are at increased risk of metabolic acidosis. This can lead to **bone loss, muscle wasting, and fatigue**. The primary intervention is the use of sodium bicarbonate. Bloodwork and interventions should be based on patient preference - if the patient wishes to have treatment of acidosis for potential symptom benefits, it would be reasonable to monitor CO₂ every three months.

▶ **GFR 15 - 5 | Slow Decline/Deteriorating | Last 0-5 years of life**

The recommended intervention for treating acidosis contributes to a higher pill burden for patients. However, there may be benefits in terms of **bone health, nutrition and energy**. Therefore, it may be reasonable for patients to continue taking sodium bicarbonate (if indicated) for **as long as they feel that it is not burdensome**.

▶ **GFR 5 - 0 | Intensive/Near Death | Last 0-2 months of life**

When the patient is no longer able to swallow pills, or is bed bound and approaching the end of life, it is appropriate to stop this intervention and related bloodwork.

Objectives: To guide the multidisciplinary approach to **evaluation and management** of metabolic acidosis in conservatively managed patients with chronic kidney disease based on the following inclusion criteria:

- Serum total CO₂ < 22 mmol/L.
- Stable clinical status as determined by a physician.

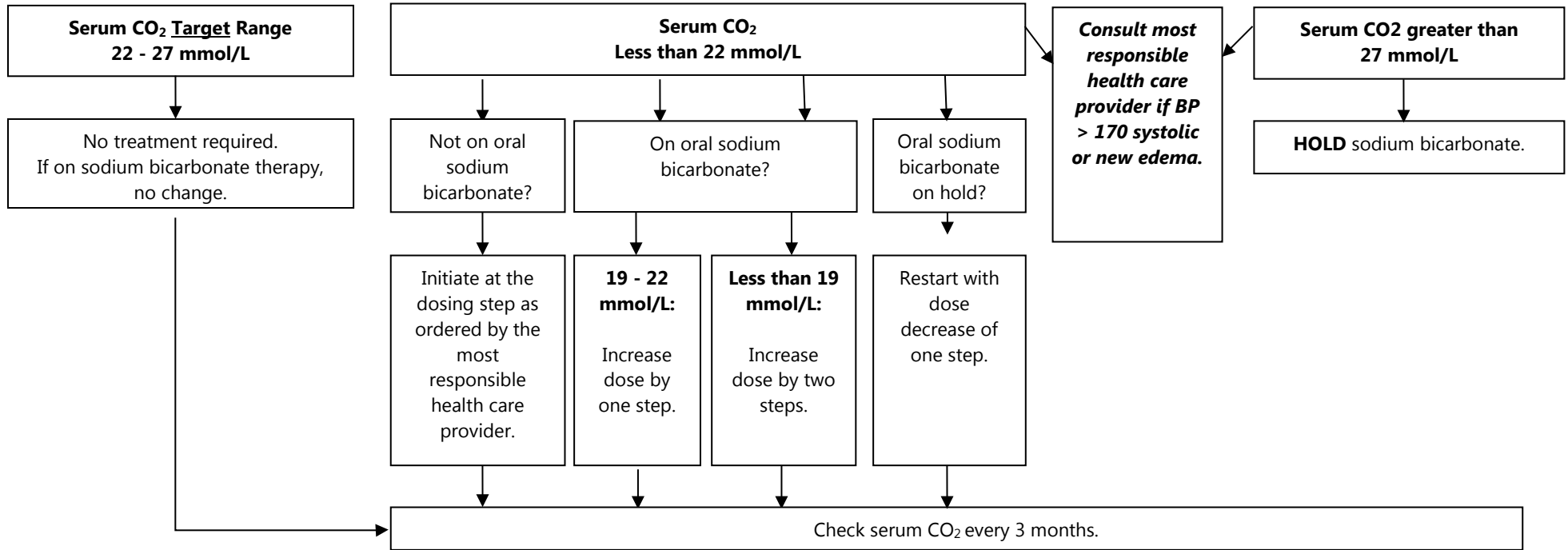
Patients will be excluded in the presence of:

- Overt CHF
- Uncontrolled hypertension (> 170 mmHg systolic)

Interventional guidelines do not replace individualized care and clinical expertise.

*Adapted from the AHS Acidosis (Metabolic) Management Guideline (June 2015), Alberta Kidney Care (AKC), Chronic Kidney Disease Clinics.

Acidosis (Metabolic) – Clinical Algorithm for CKM Patients



Dosing Chart for Sodium Bicarbonate	
Sodium Bicarbonate will be ordered in either 325 mg or 500 mg tablets	
To be taken on an empty stomach (at least one hour pre or post meals)	
Step 1	One tablet once a day
Step 2	One tablet twice a day
Step 3	Two tablets twice a day
Step 4	Three tablets twice a day
Step 5	Four tablets twice a day

*Adapted from AHS Acidosis(Metabolic) Management Guideline (June 2015),Alberta Kidney Care (AKC), Chronic Kidney Disease Clinics.

Conservative Kidney Management Acronym Legend

Acronym:	Intended Meaning:
ATC	Around the Clock
BID	Twice Daily
CKD	Chronic Kidney Disease
CKM	Conservative Kidney Management
COPD	Chronic Obstructive Pulmonary Disease
CO ₂	Carbon Dioxide
EOL	End of Life
ESA	Erythropoietin Stimulating Agent
ESKD	End Stage Kidney Disease
GFR	Glomerular Filtration Rate
GI	Gastrointestinal
g/L	Grams per litre
HgB	Hemoglobin
IN	Intranasal
IU	International Units
IV	Intravenous
kg	Kilogram
mcg	Microgram
mg	Milligram
mL	Millilitre

Acronym:	Intended Meaning:
mmol/L	Millimoles per Litre
OTC	Over the Counter
PO	By Mouth
PRN	As Needed
NSAID	Non-steroidal Anti-inflammatory Drugs
q(1-8)d	Every (Time Eg, 2) Days
q(1-8)h	Every (Time Eg, 4) Hours
q(1-8)weeks	Every (Time Eg. 2) Weeks
QHS	At Bedtime
RLS	Restless Leg Syndrome
SC	Subcutaneous
SL	Sublingual
SNRI	Serotonin and Norepinephrine Reuptake Inhibitors
SSRI	Selective Serotonin Reuptake Inhibitors
TCA	Tricyclic Antidepressant
TID	Three Times a Day
>	Greater Than
≥	Greater Than or Equal To
<	Less Than
≤	Less Than or Equal To