

Training for Primary Care Physicians, Extenders, and Care Teams

# Optimal Medical Therapy

## Slow Aging and Delay Chronic Disease

### Proactive MD

*" it is now critical for physicians to reconceptualize SGLT2 inhibitors as organ-protective agents rather than glucose-lowering drugs"*

*Achieving the Quadruple Aim with New Science, New Systems, and New Outcomes™*

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ValidationInstitute

# Optimal Medical Therapy (OMT) A new universal standard of care



William Boden  
Boston University



David Maron  
Stanford

## OMT First in New ACC Guideline

### Lead authors of the landmark COURAGE and ISCHEMIA trials

*J Am Coll Cardiol.* 2015 August 18; 66(7): 774–776. doi:10.1016/j.jacc.2015.06.018.

### Why Optimal Medical Therapy Should Be a Universal Standard of Care

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# Optimal Medical Therapy vs Usual Care

- Optimal Medical Therapy (OMT) for cardiovascular and related conditions is a comprehensive set of integrated evidence-based care processes consistent with best practices.
- Usual care is the treatment that we find in the broader community.

**Quality is a systems property. OMT is a product.  
We supply the systems to produce that product.**

# The Kaiser Collaborative Coronary Care Service improved outcomes and lowered costs with OMT

*If the providers caring for your members with a history of coronary artery disease use a simple ten step check list and participate with you in collaborative cardiac care, the mortality rate for patients who have had a myocardial infarction will fall 76% and costs will drop \$21,900 per patient per year.<sup>1,2</sup>*

## 4.5-year average enrollment

	Usual Care (N = 628)	Intervention (N = 628)
CV Mortality	98	12
All-Cause Mortality	188	16

## Same Study-4896 Patients with Heart Attack or Stent

Engagement	% Mortality Reduction	Number of Patients
Early CCC <90 Days	89	1630
Delayed CCC >90 Days	65	1211
Intermittent CCC	46	483
No CCC		1572

## Optimal Medical Therapy (OMT)

Delate T Pharmacotherapy. [2010 Nov;30\(11\):1127-35](#)

Sandoff BG The Permanente Journal [2008;12\(3\):4-11](#)

[Pharmacotherapy 2007;27\(10\):1370-1378](#)

# OMT slows aging, delays chronic disease development, and can prolong life now—21-year Steno-2 follow-up

Variable	Intensive Therapy	Usual Care	Absolute Risk Reduction
Number of matched subjects	80	80	
CV events after 8 yr. intervention	33	85	
All-cause mortality at 13 yr.	24	40	20%
CV mortality at 13 yr.	9	19	
Heart attack	9	35	
Stroke	6	30	
Coronary Stent	1	11	
Amputation	10	33	
All CV events	51	158	29%
Progression to dialysis	1	6	
Progression to blindness	2	7	
All-cause mortality 21 years	38 (48%)	55 (69%)	21%
Median survival 21 years	+8 yr.		
Median time to first CV event	16.1 yr.	8yr	

# Landmark article points to the common molecular biology of chronic disease and aging

The NEW ENGLAND JOURNAL of MEDICINE

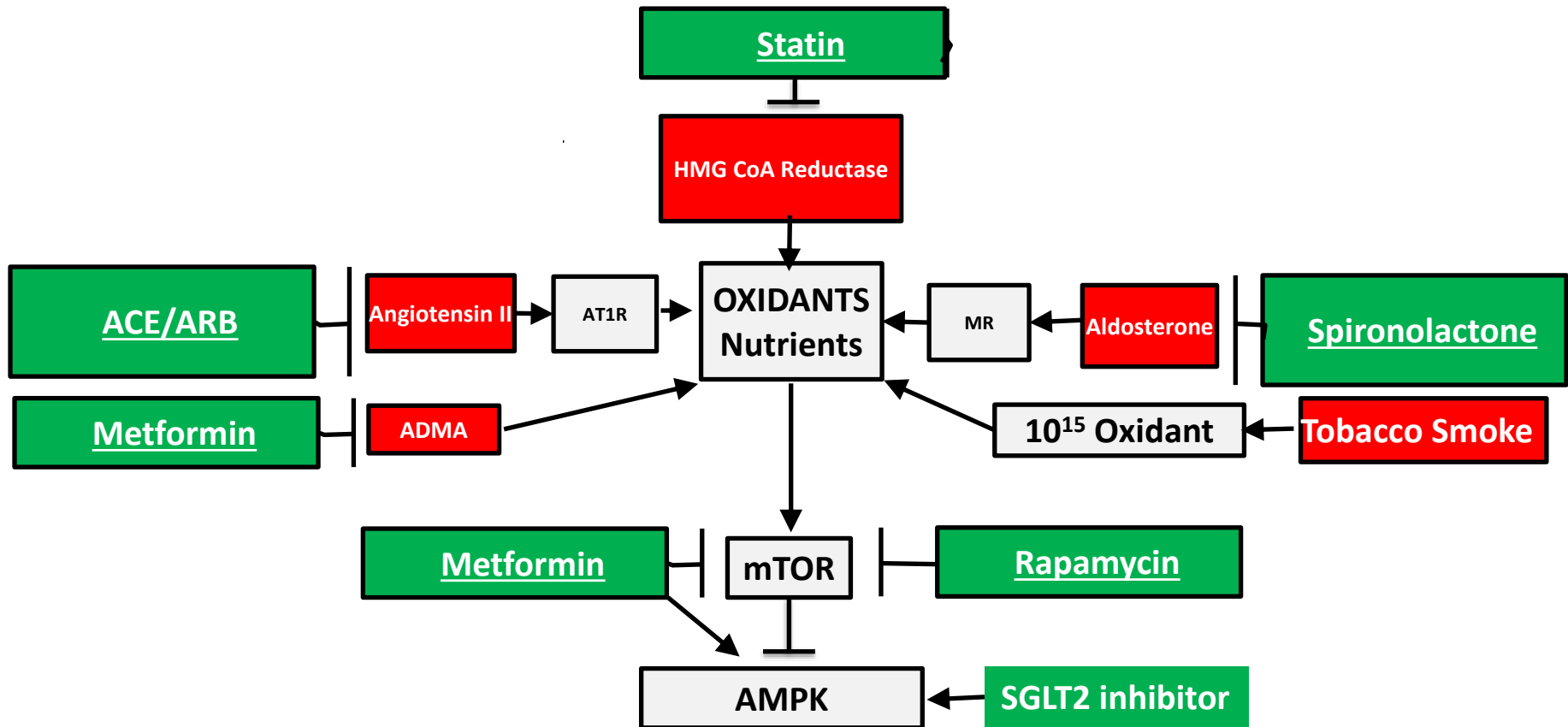
REVIEW ARTICLE

Dan L. Longo, M.D., *Editor*

## Effects of Intermittent Fasting on Health, Aging, and Disease

- Intermittent fasting reduces oxidant production, insulin, and IGF-1 levels, inhibits mTOR, activates AMPK, PCG1a and sirtuins, while increasing mitochondrial biogenesis
- Eating real food adds to intermittent fasting benefit because it reduces the oxidant load and contains antioxidants.

# Interfering with core signaling pathways slows chronic disease development and aging



eLife 2017;6:e31268 DOI: [10.7554/ELIFE.31268](https://doi.org/10.7554/ELIFE.31268)

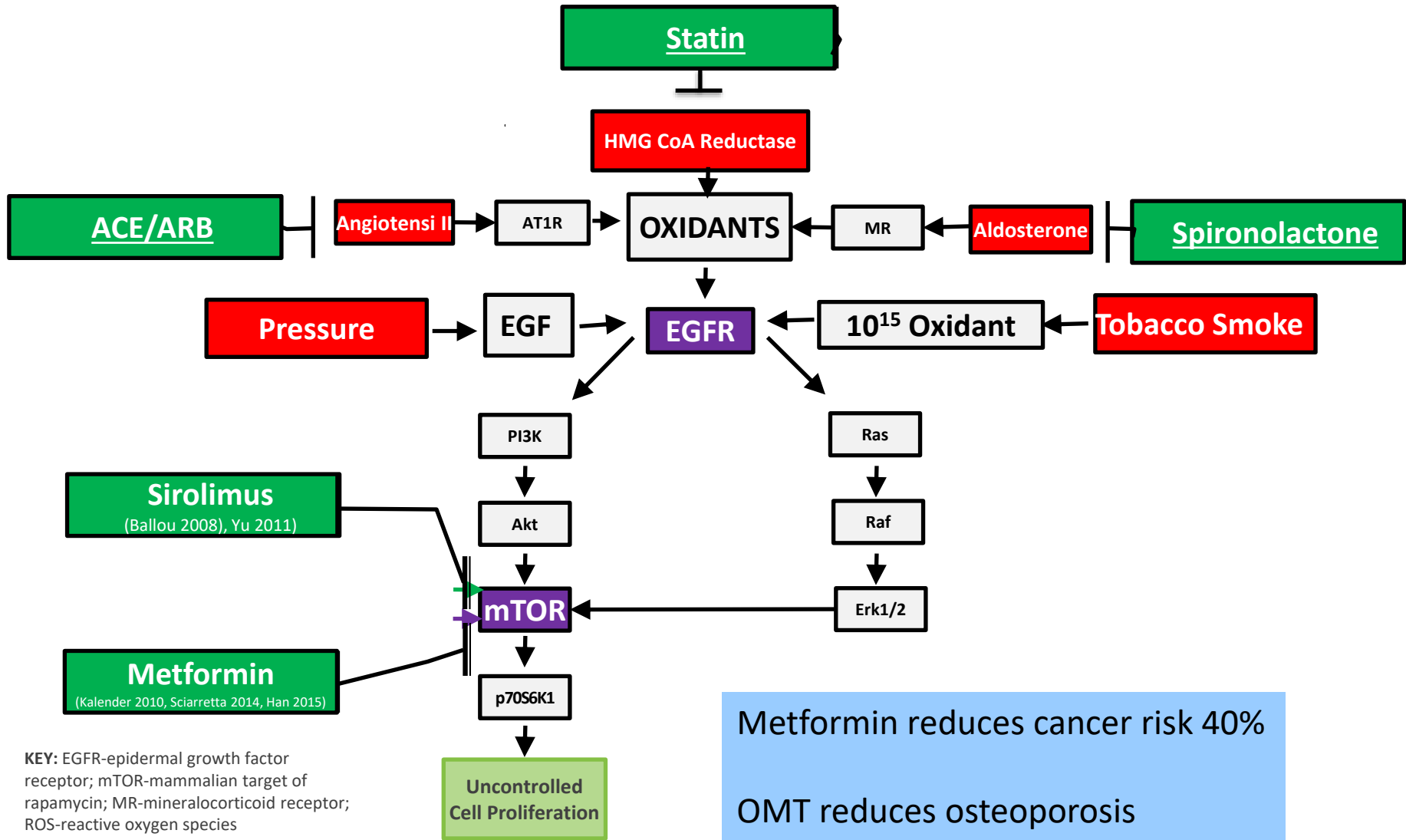
[Cell Metab. 2010 May 5; 11\(5\): 390–401](#)

[Cell Metabolism2016;24;521-522](#)

KEY: MR-mineralocorticoid receptor; ROS-reactive oxygen species

Sources: See notes section

# Green boxes reduce all-cause mortality

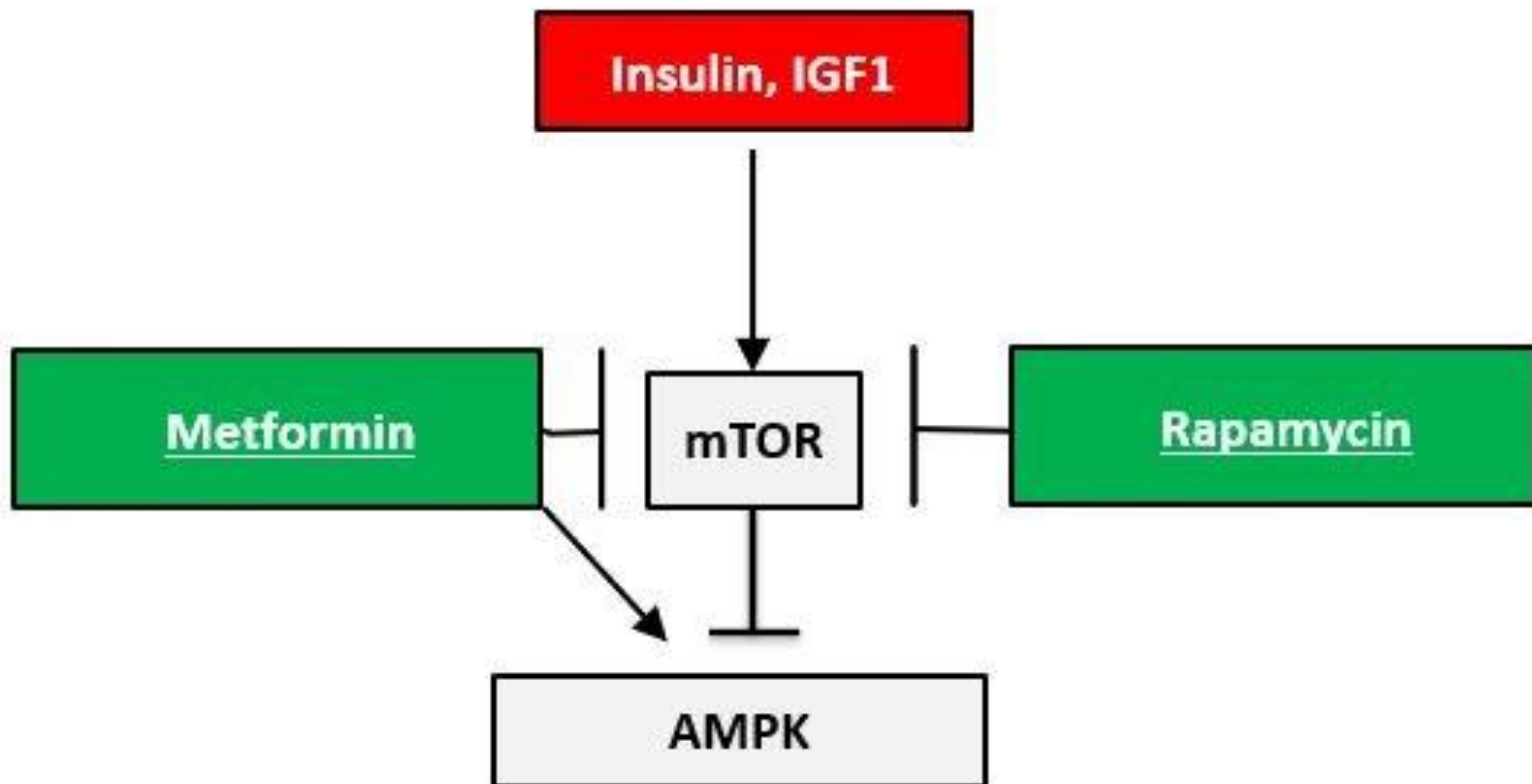


KEY: EGFR-epidermal growth factor receptor; mTOR-mammalian target of rapamycin; MR-mineralocorticoid receptor; ROS-reactive oxygen species

Sources: See notes section



# Insulin is a Growth Factor that Activates mTOR and inactivates AMPK



# Here are the 11 simple OMT steps for Post MI patients—Co-pilot checklist

## Achieve Three Goals

1. Target LDL cholesterol goal of 70 mg or less
2. Target hemoglobin A1c target of 8% in diabetics
3. Target blood pressure of 130/80 or less

## Provide Eight Treatments

1. Antiplatelet therapy
2. Counseling and medication as needed for smoking cessation
3. Atorvastatin or rosuvastatin regardless of LDL cholesterol level
4. Lisinopril or losartan regardless of blood pressure status
5. Metformin if diabetic or prediabetic
6. Provide spironolactone or eplerenone regardless of blood pressure status
7. Carvedilol or metoprolol for patients with angina or history of MI
8. Short-acting nitroglycerin and long-acting as needed for chest pain management with angina or history of MI

**Demonstrating empathy, achieving trust, and active  
Listening are critical for patient engagement**

# 1-Updated Introduction and Directory: Posts 2 through 43 Support You in Producing Optimal Medical Treatment Consistently

Slowing Aging and Delaying Chronic Disease Onset

## Directory

- Posts 2-11 Heart Artery Disease
- Posts 12-22 High Risk Type 2 Diabetes
- Posts 23-28 High Blood Pressure
- Post 29-39 Lower Risk Type 2 Diabetes
- Post 40-42 Congestive Heart Failure
- Post 43 A Unifying Hypothesis of Chronic Disease and Aging

## Heart Artery Disease

2. [You Can Slow Accelerated Aging and Delay Chronic Disease with a Few Simple Steps](#)
3. [Optimal Medical Treatment Pays Huge Dividends in Heart Artery Disease](#)
4. [Stents Provide No Additional Benefit to Optimal Medical Treatment For Heart Artery Disease](#)

# OMT is a product

## Set up the systems to produce it!

- Proactive MD serves 50,000 patients
  - 7.1% of individuals aged 45-65 have coronary artery disease
  - 9.6% of people aged 45-65 have had CAD or stroke
  - 7.4% of patients aged 45-65 have had MI (many more had a stent)  
Proactive MD serves 50,000 patients
  - 7% of 50,000 is 3,500 x \$21,000=\$76,650,000 in savings
  - Document savings to appeal to new clients
- Proactive MD Collaborative Cardiac Care Service
  - Use ICD-10 codes to identify patients with CAD
  - Identify nurse practitioner and MD team
  - Align team using Substack training
  - Provide protocols, handouts, population health and analytic support
  - Use baseline and quarterly data to adjust intervention



*Care without compromise.™*

**You have the perfect instrument at the perfect moment in time!**

**Lead the way to better health at lower cost.**

