

**Dr. BHATT:** So there are potentially several other ways of demarcating risk beyond just measuring LDL cholesterol, beyond just measuring clinical risk, such as folks that have recurrent ischemic events or maybe polyvascular disease. One other way is just considering other sorts of adjunctive information biomarkers, imaging potentially. I guess, in my mind, I think, beyond LDL, the two things I always try to get on patients is an hsCRP, in large part, based on the body of work that you've accumulated over decades. And I guess the other one that I might pay attention to more now is triglycerides.

But beyond just those sorts of simple, easy-to-get biomarkers, there are folks that are advocating coronary calcium CT scoring. And I think in some patients that certainly the studies now show can help refine risk stratification. Of course, it is a little bit more expensive than just getting a few blood tests. I'd rather spend the money on an hsCRP than a coronary CT scan.

But assuming that those biomarkers I mentioned are already obtained, and there's a further desire for risk stratification, why I've been skeptical in the past of it, I guess I've got to acknowledge that the data supporting how coronary calcium scoring can reclassify patients has been pretty consistent. So other than a small radiation dose and rather modest cost, it does seem to add, in some patients, the ability to risk prognosticate, and maybe convince a patient who should be on a statin anyway that they really need to take it, but--

**Dr. RIDKER:** Well, so that's the point here. So I can say I've run a cardiovascular prevention clinic for 30 years. And I've ordered two CAC scans total. And they had nothing to do with risk prediction. They were for other issues. So I must say, I'm not so sanguine about the CAC part of the new guidelines. I think it's a technological solution with radiation and expense to a problem that doesn't exist.

So if you can't tell across the room from looking at your patient, talking to your patient, knowing their history, knowing their family history, and then as you're saying-- and I agree with you-- measuring a few simple biomarkers. If you don't know who should be on a statin, and you need a technological study to tell you, I'm not buying it. And I think that while, yes, there's data about risk prediction, there's not a shred of data in a clinical trial that says, if my CAC is high or low, I'm going to benefit or not. We are just believing that on a priori basis.

So I don't quite get it. Because I don't need a test to tell me who should be on a statin. I've already got them on the statin. My patients know that I'm going to ask him about their on treatment LDL's, and we ask them about compliance. So I'm not there. I don't really see why we'd be spending money on an imaging test that-- and I also don't buy into this idea that a score of 0 is a safety pass. I don't know where that came from.

I think we have patients who don't calcify. And they have lesions, and those lesions can rupture. So it's not a biologic issue. It's just a picture of calcium. And remember, please don't get a second one. If you get the first one, do not get the second one. Because statins increase the calcification. And what's the message you're going to give to your patient? It's getting worse. No, it's getting much better. So I'm not so thrilled with this, actually.

**Dr. BHATT:** Well, honestly, you're two ahead of me because I've ordered zero CAC scores over the years. But the reality is I react to them because patients come in with them. It's actually not doctor driven, in many cases. Well, it is doctor driven. But it's being done by many hospitals. It's a profit center of many hospitals. And patients love it, at least patients that know about it.

So I think as costs drop, as radiation dose drops, more patients will be getting it, regardless of the fact that you and I think that it's not totally evidence based. You're right, it's evidence base for risk prognostication. But what hasn't been done is a large randomized trial to show that this patient with this CAC score getting the statin, who otherwise shouldn't have, or getting aspirin, as well, who otherwise might not have. That's the way to [INAUDIBLE]. If that trial happened, I'm all in.

**Dr. RIDKER:** Well, yeah, but what's being said, though, is just the opposite. They're saying, the way I heard the guidelines was if your calcium score is low, you're home free. And I'm not comfortable with that at all.

**Dr. BHATT:** I agree with you. That's putting a lot of faith in CAC scores. I think if I were doing a trial to risk [INAUDIBLE], I'd be very happy using a CAC score. But I think to do that in clinical practice and say, her CAC score is zero. Go to McDonald's. That could be a dangerous message.

**Dr. RIDKER:** But I guess what I'm getting at is I bet you you couldn't do the trial. Because anyone with a high CAC in primary prevention, they're most likely going to have either a high LDL or a high CRP. Those two groups already require a statin from trials. So I don't know how you're going to find these people who, unless you're just enroll to CAC low patients, fine, that could be done. So that's what I'm saying. I don't see how getting a high CAC score is going to tell me what I don't already know. But I'm an imaging person, so--

**Dr. BHATT:** Well, that's a really good perspective, both the prevention and imaging perspective. But yeah, I agree with you. I think it's one of those things. But in a sense, that horse really is out of the barn. It's like the wearable technologies and everything, and the monitoring of AFib, patients love that stuff. They're going to keep doing it. And as price is dropped, it will become more prevalent, even if it shouldn't.