Expert Interviews

National HIV Curriculum Podcast

New Guidelines: Statin Therapy for People with HIV to Prevent CVD

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The first ever statin therapy guidelines to prevent cardiovascular disease (CVD) in people with HIV were released February 27, 2024. Dr. Chris Longenecker, a University of Washington Associate Professor of Medicine, and National HIV Curriculum Podcast Lead Editor Dr. Brian Wood discuss the recommendations and their clinical implications.

Topics:

- CVD and HIV
- Statins
- CVD Prevention
- ASCVD

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Transcript

Read along with the audio or jump to a particular chapter.

In this episode:

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intro--background**[00:00] Intro & Background**

Hello everyone. I'm Dr. Brian Wood from the University of Washington in Seattle. Welcome to the National HIV Curriculum Podcast. This podcast is intended for health care professionals who are interested in learning more about the diagnosis, management, and prevention of HIV.

So as we've discussed in other episodes, individuals with HIV, even those with suppressed HIV on antiretroviral therapy, have higher risk of major cardiovascular adverse events as compared to individuals without HIV. We've talked about that. We talked about the REPRIEVE trial. We talked about hyperlipidemia management. Dr. Longenecker, in the episode of REPRIEVE, even mentioned we'll see what guidelines panels, guidelines committees, and how they interpret the results, what guidelines they come up with, and now lo and behold, we have guidelines to discuss. So, I'm really excited that we get to talk about this today. And this will be a part of a series of episodes, conversations with Dr. Longenecker on cardiovascular disease (CVD) prevention for people living with HIV—a really critical topic.

So, I'm really lucky and honored to welcome Dr. Longenecker back to discuss the statin guidelines. I've previously introduced Dr. Longenecker on two recent episodes. I'll do a little bit of more of a short, sweet introduction this time. As a reminder, Dr. Longenecker is associate professor of medicine here at the University of Washington faculty and Division of Cardiology and Department of Global Health and has a long list of publications, accolades, and current roles as we were just discussing. Chris, welcome back.

Dr. Longenecker:

Thank you so much, Brian. It's always a pleasure.

Dr. Wood

I'm really lucky and honored to be able to talk to you about this again. Now we have what I think are the first-ever guidelines specific to people with HIV (PWH) on statin therapy, and really eager to get your perspectives.

why-have-guidelines**[01:54] Why Have Guidelines?**

Dr. Wood

So, without further ado, maybe we could start with your opinion on why it was really important to develop national guidelines on this topic.

Dr. Longenecker

Yes, of course, you know guidelines are written to help busy clinicians distill the scientific literature into real concrete actions. For HIV clinicians, in particular, who certainly have more experience and continuing medical education and infectious diseases and HIV medicine, et cetera, I think any guidance on these primary care issues of chronic non-AIDS comorbidities is really super helpful. But at the end of the day, guidelines are just guidelines, and the scope of what I think would be considered acceptable practice and standard of care is broader than the exact recommendations given here.

So, I think, some clinicians will be stronger advocates for statin use in their patient population. Others will be more hesitant, and my hope is that these guidelines will move more practicing clinicians into that statin advocacy camp. To basically make it more common that clinicians are having the statin conversation with their patients.

Dr. Wood

Thanks, Chris. I'm thinking back to the conversation we had about REPRIEVE and hyperlipidemia management, and you really emphasized the importance of that conversation and of considering statins, and sounds like that's going to be one of the biggest takeaways from these guidelines as well. Would you agree?

Dr. Longenecker

Absolutely. I think there was just a large segment of our patient population who never even talked about statin with their provider. And so now, now there's a compelling reason that we really should be talking about it with everybody, and some people may choose not to start a statin, and that's fine.

Dr. Wood

I think that's a really important way, though, to sum up what will likely be just a really key message from this discussion. So I'm sure we'll come back to that.

a1-recommendation**[03:54] A1 Recommendation**

Dr. Wood

But let's get into the nitty-gritty of some of the recommendations here. And let's start with the first part of these new guidelines. This recommendation has to do with people with HIV who are age 40 to 75 and have a cardiovascular disease risk estimate using the pooled cohort equation between 5 and 20%. So perhaps for our listeners, you could review the key points of this recommendation and then give us a bit of your opinion about it.

Dr. Longenecker

So here, I don't think there's that much of a departure from the 2018 U.S. Joint Society guidelines, the AHA [American Heart Association], the American College of Cardiology all endorsed the 2018 guidelines. Except that here now they're saying the quality of the evidence is higher because we have a randomized controlled trial and REPRIEVE. And so, the recommendation to start a statin is phrased more directly and strongly. So, in the 2018 guidelines, HIV was considered a \"risk enhancing factor\" that would tilt you more towards recommending a statin for participants with an ASCVD [atherosclerotic CVD] risk score, maybe in that lower part of the 5 to 20 range, right, 5 to 7.5%. Whereas, now, it's just much more straightforward. Statin is recommended, moderate statin is recommended for this group, and it's an **A1** recommendation, meaning it's a strongly recommended on the basis of high-quality evidence. So that high-quality evidence obviously being REPRIEVE.

Dr. Wood

And I would refer listeners back to our discussion of REPRIEVE as well. But it sounds like, Chris, for this part of the recommendations, it's a stronger recommendation but not too much of a departure from prior guidelines or from what I think a lot of clinicians or yourself were doing in clinical practice. Would you agree?

Dr. Longenecker

Totally agree. This was, I think, basically just a reaffirmation of those 2018 guidelines.

high-ascvd-risk**[06:00] High ASCVD Risk**

Dr. Wood

So there's a big difference between 5 and 20%. How does that difference affect the conversation you have with the person in clinic?

Dr. Longenecker

Well, remember that for those in the DHHS guidelines also reiterate that there are certain statin benefit groups that merit even a stronger statin, not just a moderate-dose statin, but a high-intensity statin people with an ASCVD risk score of greater than 20%, for example, or people with an LDL cholesterol greater than 190, or are patients with diabetes. So, that's a pretty good segment of fairly high-risk individuals.

So, yes, as you get towards 20% I think, you know, you're starting to think of not just a moderate statin but a high-intensity one. So, I think it matters. It's obviously the absolute risk reduction depends on the absolute risk, and these risk estimators are estimators of a population of patients with that constellation of risk factors. And for any given patient, there may be some additional considerations, and we'll talk maybe more about risk enhancers that we should always still consider. But at the lower end, I think it's just more straightforward now. It has to be simple. And so I think these guidelines do make it pretty simple for people, and that's a good thing.

Dr. Wood

Right. Thanks, Chris. And yes, there's a few things there for us to come back to, some of the factors that may affect the counseling and decision-making. And, also, let's come back towards the end and talk a little more about statin choice and statin doses.

low-ascvd-risk**[07:40] Low ASCVD Risk**

Dr. Wood

But first, going to the next part of these guidelines and new recommendations, considerations for people with HIV whose risk estimate is below 5%, could you review what's in these new guidelines?

Dr. Longenecker

So the recommendation for this group is to initiate at least moderate-intensity statin therapy, but they note that the absolute benefit is more modest in this population. And so, the decision to initiate a statin should take into account the presence or absence of these HIV-related factors that can increase cardiovascular disease risk; I think that's the exact wording. And I'll emphasize this is a weaker recommendation. So it's graded **C1**, so it's a weak recommendation as opposed to a strong recommendation.

Dr. Wood

And so follow up to that, Chris, what do you think that clinicians taking care of people with HIV should take from this? It is a weaker recommendation. I heard you say it's reasonable to recommend, but there are also a lot of factors to consider there, and I think it's great we have guidelines that consider HIV-specific factors. I haven't seen that in guidelines previously. But what do you think HIV primary care practitioners should take from this?

Dr. Longenecker

I do kind of wish that they would've phrased the second piece of that statement a little bit differently because

there certainly are HIV-specific factors that can increase risk, long-term exposure to ART, history of low nadir CD4 count, concurrent hepatitis C, et cetera. But, there are a lot of other non-HIV factors that increase risk, which may be even more important than the HIV-specific factors: things like a strong family history, elevated lipoprotein (a), or a detectable coronary calcium on CT scan. These are risk enhancers that are potentially even stronger than the HIV-specific factors. So, in my practice, I would consider, on occasion at least, if someone has a non-con [non-contrast] chest CT, I look at their non-con chest CT and see is their coronary calcium there or not. And that helps me to decide whether or not I would recommend a statin.

Dr. Wood

I want to try to sum this up for listeners. If I'm hearing you right, if someone has a risk estimate 5% or greater, there's a pretty strong recommendation and data for statin use for at least moderate-intensity statin. And below 5%, it sounds like there are a lot of factors to consider. It's worth having a conversation about it and considering both HIV-specific and non-HIV-specific contributors to cardiovascular risk. Would you agree with that?

Dr. Longenecker

Absolutely. The thing is that there aren't many cons, frankly, as long as patients are on board with the idea of taking another pill. I think the risks are low and REPRIEVE showed that there's a well-described, but very, very modest risk of diabetes, statin myalgias. But I still think that even in this low-risk group, the risk/benefit is favorable. But the moderate term, at least 5- 10-year term absolute cardiovascular risk reduction is low and the number needed to treat is high. In the guidelines, they say for 2.5 to 5%, the number needed to treat is something like 150, and less than 2.5%, it's more like 200, but still, it's reasonable.

And so, I think there's a difference here for people who are playing a real long game of lifetime risk reduction. It might be different. So, starting a statin earlier in life when their ASCVD risk score is still less than 5% for that 10-year time window, but they're willing to take a statin for 30 or 40 years, they may have a considerable lifetime risk reduction. So, on the other hand, for older people whose ASCVD risk is driven primarily by age, if they're still less than 5%, they may not want to start a statin. So, for example, although they both might have the same 10-year ASCVD risk score, a 70-year-old woman with optimal cardiovascular risk factors and an LDL cholesterol of 70 might not want to start a statin. But a 42-year-old man with an LDL cholesterol of 150, again same ASCVD risk, maybe 4% or so, but the lifetime risk for that 42-year-old is higher. So, I think these are the sorts of considerations that are somewhat nuanced, but I think primary care physicians understand these things and definitely can consider these types of scenarios.

Dr. Wood

Well, I appreciate you explaining some of the nuances and I think those examples are helpful. I also would like to ask you about something you mentioned in our episode about the REPRIEVE study. I recall you mentioned that you didn’t think statin prescriptions should become routine for individuals with estimated 10-year risk under 5%. And I think what I am hearing you say now is still don’t see proscriptions for statins should be routine for individuals in this risk category *but* conversations about statins, reviewing cardiovascular risks and considering statins, and discussing personal preferences around these medications should be a part of routine clinical practice. Would you agree and am I summarizing that message accurately?

Dr. Longenecker

Yes, I think that’s right. I didn’t think that the guidelines would come out recommending statins for everyone, including those with low risk, but I think that is still true given the weak class **C** recommendation in the current guidelines. My interpretation is that the DHHS guidelines do not necessarily recommend a statin for *everyone* with ASCVD risk of less than 5%, but rather suggests that clinicians should consider a statin based on other individual factors that increase risk. They specifically point out the HIV-related factors but as I’ve mentioned, I think that there are other factors as well that may increase the risk for any individual.

statin-use-before-40**[14:04] Statin Use before 40**

Dr. Wood

Let's turn to the next part of these guidelines. We've been reviewing the recommendations, which are for people with HIV, age 40 to 75. The next part is for individuals under 40. Would you review that part for us please?

Dr. Longenecker

So there are certain types of patients who are younger than 40, such as those with a very high LDL cholesterol greater than 190, who may have familial hypercholesterolemia [FH], heterozygous FH [HeFH], or others that may benefit from statins. But in general, the 2018 guidelines and these DHHS guidelines for people living with HIV recommend lifestyle and diet because there's really no randomized clinical trial evidence for statin benefit in this population. But, you know, nonetheless, some patients may still consider statin therapy. And so I think if someone less than 40 years old is asking about statins, it's okay to have a discussion about the risk and benefit. Especially, I think again, for those patients who have a higher LDL cholesterol, let's say between 160 to 190, that's a particularly high lifetime risk of coronary artery disease, and I think, very reasonable to start a statin. Or again, strong family history, elevated lipoprotein (a), those sorts of things.

Dr. Wood

Thanks Chris. I heard you emphasize a couple times the importance of considering lifetime risk, and I think that's an important perspective to consider. So, thanks for bringing that up.

statin-choice-dosing**[15:37] Statin Choice and Dosing**

Dr. Wood

Let's perhaps go back to choice of statin and statin dose. So, these guidelines, which are for low-to-moderate estimated risk, really emphasize recommending at least a moderate-intensity statin. Could you outline for us what that means to you and maybe revisit a little bit your choice of statin dose?

Dr. Longenecker

So there are three moderate-dose statins that are recommended by these guidelines, the pitavastatin, atorvastatin, and rosuvastatin. And I really like that they did that. They make it a little bit simpler for people, and they de-emphasize the use of some older statins like simvastatin or pravastatin. Simvastatin having all these drug interactions and pravastatin just being a generally weak statin. There might be occasion to try those statins, you know, if people have tried pitavastatin and rosuvastatin and atorvastatin and had myalgias on all three of them, maybe you can try pravastatin. I've had patients who that's the only statin they could tolerate. But we've had so many patients on pravastatin just because of drug interactions and kind of clinical inertia that I really like the fact that they name these three statins and recommend them particularly.

And so, I personally use a lot of atorvastatin and rosuvastatin, especially now that boosted antiretroviral therapy is much less common. I think, of course, we have to recognize that some patients are going to still be on cobicistat-boosted darunavir, and we have to be careful for those interactions, but for most patients, the drug interactions are really no longer an issue.

Dr. Wood

In our discussion of hyperlipidemia management, you also outlined a bit of your strategies if someone has difficulty tolerating a statin, and I really appreciated that discussion, and I'll refer listeners back to that for

considerations for statin intolerance.

Maybe, Chris, I can just come back to this question of when might you start with a different dose than what's outlined here in the recommendations? Are there instances in which you might start with lower dose or higher dose?

Dr. Longenecker

If someone is on, let's say, darunavir, like cobicistat-boosted darunavir, you might start with atorvastatin at 10 and not go higher than 20 milligrams. I still use atorvastatin, because again, we're very used to using atorvastatin. I think that for patients, again, who are established coronary artery disease: LDL cholesterol greater than 190, greater than 20% 10-year risk, these are the ones you're going to want to start on those higher doses of high-intensity statins, again, so 20 to 40 milligrams of rosuvastatin or 40 to 80 milligrams of atorvastatin.

And just to remind everyone, the intensity of the statin relates to the LDL reduction, the high-intensity statins generally reducing LDL by greater than 50%. Moderate-intensity statins really more 30 to 50% LDL reduction.

monitoring-adjusting-doses**[18:42] Monitoring and Adjusting Doses**

Dr. Wood

So, Chris, maybe you could give us your thoughts briefly on monitoring and adjusting statin doses and whether we should be treating to certain targets or not.

Dr. Longenecker

So people wonder, “I start a statin and then when should I recheck the lipids, and what should I do about it?” In general, I think it's important to recheck a lipid panel a couple months after you've started a statin just to make sure that you're achieving that 30 to 50% LDL reduction that you would expect. If you're not, maybe there's a compliance issue, maybe there's something else going on. And I think that increasing the statin dose in that situation is reasonable. There are some people who don't have as much of a response. So, let's say you're on atorvastatin 20, and you really are only achieving 25% reduction in your LDL, it might be reasonable to bump that to 40 or 80. So, there's been this movement away from treating to target. So the official guidelines recommend just checking once, basically, to ensure that people are taking it.

But I think we're going to see a movement in the future towards maybe going back to a treating to target. I think many of us preventive cardiologists believe that lower is better with all the new trials of new agents, the PCSK-9 inhibitors, for example, whether it's the monoclonal antibodies or the small interfering RNA to reduce PCSK-9 or to block PCSK-9, the drugs like bempedoic acid, which have recently been shown also to have effect on LDL cholesterol and events. So, I think that there's all these new data saying that lower is better, and so I think we may see a pivot back towards that.

But officially, right now, the guidelines would recommend not necessarily treating to target and always getting repeat lipid panels every year to try to get people further under their goal.

Dr. Wood

I find that really interesting, Chris. This is incredibly helpful.

key-take-homes**[20:49] Key Take-Homes**

Dr. Wood

I want to give you a chance to emphasize what you see as the most important take-home messages for clinicians. And if there's anything you feel like I've missed or we haven't talked about with these guidelines, please feel free. The last word is yours.

Dr. Longenecker

I go back to what I said at the beginning. I think basically we need to just have this conversation about statin therapy with all of our patients. Just make it part of the routine preventative measure, things that you do as colonoscopy screening and everything else. And ultimately, the choice to initiate a statin is going to depend a lot on individual patient's preferences. Their preference with regard to pill burden, competing priorities of other diseases, and comorbidities they may have or care about. But at least having that conversation, I think, is really important. Now that we have the results of REPRIEVE, and we have these new DHHS guidelines, which generally I see as a very favorable thing, I think it's going to move the needle on cardiovascular disease prevention in this population.

Dr. Wood

Chris, thank you so much. I really appreciated this conversation. I think this was an excellent discussion about these new national recommendations and how they may affect and inform discussions and clinical practice.

Dr. Longenecker

Well, thank you, Brian. I really appreciate the opportunity.

credits**[22:10] Credits**

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