Chat Discussions
Friday, September 11, 2020

Recent Advances Session 4: A Focus on Women's Health

name	message
Chris Sampson	Welcome! As you enter the player, you should hear music playing. If you do not, please click the Request Support button. Thank you and enjoy the conference!
Styliani Goulopoulou	Hello everyone! Welcome to Recent Advances Session 3 "A focus on Women's Health". My name is Stella Goulopoulou, I am an Assistant Professor at the University of North Texas Health Science Center and today I will be the moderator of this session.
Mark Santillan	Good to be logged in and to hear from you Stella!
Styliani Goulopoulou	I know we all experienced some difficulties with the site this morning! I am very sorry about this.
Camilla Wenceslau	Good morning from OH. :)
Donna Santillan	Thanks for your help logging on!
Augusto Montezano	Hi Stella! I think it is all working now
Nirupama Ramkumar	Good morning from Salt Lake City !
Stephanie Watts	Good morning, fellow scientists!
Alexander Staruschenko	Good morning! Looking forward to this exciting session!
Carmen DeMiguel	Good morning from Birmingham, AL!
Sarosh Rana	Thank Stella. Good morning everyone
Barbara Alexander	Good morning! Looking forward to this session.
Styliani Goulopoulou	Please make your colleagues aware that the site is now live. They should have no problem to log in.
Swapnil Hiremath	Good morning everyone - excited for day 2
Curt Sigmund	Good morning everyone!
Eman Gohar	Good morning everyone.. Looking forward to this session!
Sarah Lindsey	Good morning from New Orleans!
Sabrina Scroggins	Good morning all. Very excited for this session:).
Robert Carey	Good morning! Anticipating a great session.(blush)
Justin VanBeusecum	Good morning everyone, this is going to be a great session!
Amy Arnold	Good morning from Hershey, PA and thanks for planning an awesome session!
Curt Sigmund	Day 2- Let's keep up the scientific discourse in the chat box, it was great yesterday!

Yagna Jarajapu	Good morning from Fargo ND
Fernanda Priviero	Good morning everyone!
Lorena Citterio	Greetings from Milano, Italy(blush)
Augusto Montezano	Good Afternoon from (surprisingly) sunny Glasgow UK
Mary Haynes	Morning Italy, miss you
Asako Mito	Good morning from Tokyo!
Mariane Bertagnolli	Greetings from Montreal, Canada!
Styliani Goulopoulou	Greetings to all! It is great seeing you all here! Our session features 2 experts in women's health research, Dr. Sarosh Rana and Dr. Sarah Lindsey. The talks are prerecorded but our goal is to have an interactive session. The speakers are online and in the chat feature and ready to address your questions. Good morning, Dr. Rana and Dr. Lindsey!
Jane Pearson	Hello ALL from Madison, WI!
Eric BelinDeChantemele	good morning everyone
Eric BelinDeChantemele	looking forward to an exciting session.
Rheure Alveslopes	Hello everyone :-)
Frank Spradley	Good day!
Jasmina Varagic	Good morning from NIH
Curt Sigmund	Thanks to Drs. Rana and Lindsey for participating in the conference and this live chat.
Jessica Bradshaw	Good morning, everyone! I am very excited to hear from Drs. Rana and Lindsey! Thank you to the organizers for highlighting this topic!!
Curt Sigmund	Thanks to Dr. Goulopoulou for chairing this session and guiding the chat.
Curt Sigmund	F11 will slightly enlarge the screen, F11 again to toggle out.
Styliani Goulopoulou	Dr. Rana: does the number of pregnancies a woman has in a lifetime modify this risk?
Sarosh Rana	yes- multiple pregnancies with preE is worst than one pregnancy. I show some data later
Stephanie Watts	I am grateful for this session - my sister in law went into the hospital last night for preeclampsia, so I am listening carefully!
Styliani Goulopoulou	Dr. Rana: This is interesting as there are data to suggest a J shape relationship between parity and CVD later in life in non-preeclamptic pregnancies
Eman Gohar	Not all studies report how many previous pregnancies.. so apparently this is useful information to include in clinical studie
Styliani Goulopoulou	This is a great comment, Eman. Reproductive history should be always reported in clinical studies 9when feasible and available of course)

Eman Gohar	Agreed! I am not sure whether there are good records for that.. however it is a really important aspect to make sure to be included in future trials
Styliani Goulopoulou	Eman, I always think that animal studies should also report whether the female animals had previous pregnancies or not.
Sarah Lindsey	So the same px that experienced systolic dysfunction during pregnancy had diastolic dysfunction later?
Camilla Wenceslau	Dr. Rana - is any difference in the placenta (functional/structure) from woman with preeclampsia (no heart failure) and woman with preeclampsia that develops heart failure?
Sarosh Rana	There are two groups of patients- some who have systolic dysfunction and have frank PPCM. And then there are group of patients who have subclinical diastolic dysfunction - which can lead to CVD many years later
Sarosh Rana	Camilla- good question- I have not studied that placenta in these two groups.
Jean Regal	Does cardiac dysfunction postpartum have any relationship to small for gestational age infants in the preeclamptic pregnancy?
Sarah Lindsey	Is that interesting that preeclampsia would promote systolic dysfunction since increased afterload promotes diastolic dysfunction, especially in females?
Camilla Wenceslau	Thank you
Mark Santillan	Hi Sarosh, What a great and important talk! 40,000 foot question for you. There is clear evidence that you show that preeclampsia diagnosis is not a simple as we think it is given the data on molecular-omic clustering and even hemodynamic clustering of the disease. From a research perspective, how should we move forward in studying the disease that has a messy diagnosis.
Sarosh Rana	Yes- our proportion of IUGR was low- but patients with IUGR also have higher rates of CVD later in life
Eman Gohar	Stella, this is a really important point that is usually ignored.. most animal studies are conducted in virgin animals.. less studies have looked at differences between animals that were employed in breeding
Sarosh Rana	Thanks Mark- biomarker based assessment of preE and biochemical profiling of patients to find ways to find CVD
Sarah Lindsey	Eman, that is so true. We have some studies in retired breeders but not many people use these (but they are available and not expensive)
Sibel Enar	Anydata about RV dysfunction?
Nirupama Ramkumar	Nice talk, Dr. Rana. Is there higher risk for pre-eclampsia if there is pre-existing kidney disease ?

Sarosh Rana	Yes- high rates of preeclampsia in women with CHTN, lupus, kidney disease, kidney transplant
Eman Gohar	Sarah, I agree.. we should use retired breeders more often as those are better in resembling women population.. however aging our own colonies in house is expensive..
Justin VanBeusecum	Great talk Dr. Rana, Is there any data looking at the role of T cells, specifically memory T cells in the role of long term CVD, after a pre-eclamptic pregnancy?
Jan Basile	What about the role of aspirin as a preventive. When to start, when to stop, and when not to use? Thank you for the excellent talk.
Jessica Faulkner	Very nice talk! Were there any measures of association of the cardiac dysfunction with RAAS changes?
Sarosh Rana	Justin- I am not aware but that is a good question
Sarah Lindsey	Dr. Rana, great talk! Is there data to support that normal healthy pregnancy promotes cardiac health later in life?
Stephanie Watts	How do you improve education of the OB/GYN who may just focus on the 'now' of PE vs a womans CV health?
Analia Loria	Dr. Rana, Is it known whether obese women have increased angiogenic factors during pregnancy?
Sarosh Rana	Jan-role of aspirin is only approved during pregnancy
Styliani Goulopoulou	Stephanie: I'd start at medical curriculum - our med students get very little about pregnancy complications
Sarosh Rana	Stepahnie- yes- education among all care providers about CVD prevention for women
Stephanie Watts	Thank you, Stella and Sarosh!
Sarosh Rana	There are certain cardio metabolic clinics in certain institutions for patents with risk of CVD to get appropriate f/u
Jane Reckelhoff	Medical curriculum has NO gender differences education, much less preeclampsia! Really sad in this day and age.
Eman Gohar	Great talk, Dr. Rana. earlier data suggested benefit for pravastatin in preventing preeclampsia. Any updates about the use of statins in preeclampsia?
Carmen DeMiguel	Excellent talk Dr. Rana! Thank you!
Styliani Goulopoulou	Let's change this, Janie!
Jan Basile	Stat aspirin at 13 weeks in those with chronic hypertension and gestational hypertension at 13 weeks and stop at 37 weeks, baby aspirin? Correct?
Mark Santillan	Amen Janie!
Jane Reckelhoff	We're trying!!

Sarosh Rana	Prevatstin trail is on on going. No real therapy right now for prevention of CVD
Sarosh Rana	Jan- yes- I give ASA - start 12-16 weeks and continue till delivery. Risk factors classified by USPTF
Sarosh Rana	81 mg aspirin at night
Donna Santillan	Janie and Stella - I have lectures I give on it if you ever want them.
Sarosh Rana	Ok - thank everyone !
Spencer Cushen	I think that is a pretty strong statement. There was quite a bit of gender/sex difference training at the school I attend
Mark Santillan	Sarosh, what do you think of higher Aspirin dose doses as in the Aspre Trial
Eman Gohar	Janie and Stella, The Women's office at NIH provided some good educational material.. I have seen the neuronal one.. that will be a good option to incorporate in medical curicula.. I have not seen one for cardiovascular system though
Jane Reckelhoff	Why do the most recent guidelines for Hypertension treatment, published 2917, include women as an "other group" and no mention of preeclampsia?
Jane Reckelhoff	Sorry, 2017
Carmen DeMiguel	Dr. Lindsey, what about women that underwent surgical menopause and started E2 therapy right after? Is there anything known about their CVD risk later in life? Is it similar to those that have natural menopause?
David Pollock	Sarah, is there any evidence that the GPER agonist, G1, does or does not activate the truncated ERalpha receptor?
Sarah Lindsey	There is one report that G-1 increases expression of the truncated ERa-36, but I don't think they showed it directly binds to it.
Carmen DeMiguel	Sarah, does G1 treatment lead to decreased vascular inflammation in the mRen2 rats on high salt?
Sarah Lindsey	Carmen, that is a really interesting question. We have not looked much as inflammation, athought in the OVX+G1 study there was an increase in circulating CRP, which was surprising.
Stephanie Watts	Sarah, where is GPR1 in the HEART itself?
Styliani Goulopoulou	Dr. Lindsey: do these animals have cardiac hypertrophy?
Purnima Singh	Dr. Linsey: was there any difference in daytime vs night time BP in these mice?
Sarah Lindsey	Hi Stephanie! GPER is expressed in cardiomyocytes and mast cells
Stephanie Watts	Thank you...

Eman Gohar	Sarah, any binding studies for vascular GPER showing specificity for E2 vs aldosterone?
Sarah Lindsey	Stella, there was a slight increase in cardiac hypertrophy in the female Ko mice
Styliani Goulopoulou	Wondering about their SV...
Jessica Faulkner	Dr Lindsey, great talk, are there endogenous differences in GPER expression between the endothelial or vascular smooth muscle cells in females?
Sarah Lindsey	Purnima, we didn't see an huge difference in circadian patterns but it's worth exploring more
Sarah Lindsey	Eman, no one does binding studies anymore! We need to do this.
Eman Gohar	:)
Sarah Lindsey	Stella, in the next study coming soon we have cardiac echo.
Styliani Goulopoulou	I am looking forward to see these data, Sarah!
Purnima Singh	Thank you, Dr. Lindsey! Its a great talk! If you have data you can explore as PP was significant.
Michelle Gumz	Great work Sarah! Women are more likely to develop non-dipping hypertension post-menopause, would be interesting to explore this in your model!
Sarah Lindsey	Jessica, good question. We haven't compared expression between those two cell types, but we know it's in both.
Sarah Lindsey	Stella, a lot of work has been done looking at GPER in the heart by my colleague Leanne Groban at Wake Forest.
Sarah Lindsey	Hi Purnima, yes we reported PP in that paper but next paper we add in PWV.
Styliani Goulopoulou	Thank you, Sarah. I will look it up.
Sarah Lindsey	Hi Michelle, my postdoc is looking into this right now and we are reading all of your papers!
Michelle Gumz	That's great! Happy to talk about it more at some point
Styliani Goulopoulou	Sarah and Sarosh, how could we integrate the information you both provided? Do pregnancy complications exaggerate the effect of menopause and do they mediate the efficacy of hormone replacement therapy later? Big question...
Jessica Faulkner	Thank you!
Sarah Lindsey	OOH good question Stella. I don't know any studies that have associated pregnancy with response to MHT
Stephanie Watts	Sarah, is there any evidence that G-1 could act to DIRECTLY inhibit NADPH oxidase?
Mark Santillan	Great talk Sarah! To dig in to Stella's question, how does GPER change in pregnancy (animals and humans)…
Yagna Jarajapu	Does G1 antagonize AT1 receptor!

Sarah Lindsey	Yes that's a good question, in this slide there was not an effect on NADPH when given alone
Sarah Lindsey	Hmmmm...Mark, there was one person (was it you?) that mentioned they looked at GPER in normal vs PE placentas and there was a difference, but I don't remember the direction
Eric BelinDeChantemele	Sarah, did you check the effects of G1 on the other noxes
Augusto Montezano	Sarah, have you looked at other Noxs? And have you measured H2O2 specifically in your models?
Satoru Eguchi	I missed that if these rat VSMCs are from male or female?
Sarah Lindsey	Eric, Nox1 was also affected
Sarah Lindsey	Hi Dr. Eguchi, we did the experiment in both A7r5 and primary isolated male and female rat ASMC
Satoru Eguchi	Hi Sarah:
Eric BelinDeChantemele	Not surprised. thanks Sarah.
Sarah Lindsey	Yagna, it does look like that, doesn't it? I know there was a binding study showing AngII doesn't bind GPER although there is homology. But whether G-1 binds AT1 was not tested. BUT we didn't see a BP lowering effect when we gave G-1 to mRen2 male rats
Sarah Lindsey	Augusto, Nox1 also had some changes and no, we use Escan but don't specifically measure H2O2
Satoru Eguchi	Interesting. Did they all respond to G1 equally?
Mark Santillan	I wish it was me. Your mechanism would be cool to look into (as Stella asked) as a mechanism that could potentially link de novo pregnancy CVD with long term CVD in menopause.
Sarah Lindsey	Dr. Eguchi, females actually had higher activity in response to AngII, but both male and female responded to G-1
Anna Stanhewicz	Are there data that show if HRT is effective/protective in humans or animal models that have overt CVD before menopause?
Aaron Trask	Sarah, surprising that PWV didn't correlate with BP...others have shown...perhaps this is limited to your model?
Sarah Lindsey	Hi Aaron. We actually think this is cool. If PWV correlated with BP than what benefit would it add to measure it in patients? Wait for it...
Aaron Trask	lol...I'm waiting. :)
Augusto Montezano	I find the Nox4 very interesting and wonder if the vascular protective role of Nox4 is lost in your model or the increase in Nox1 tips the balance of H2O2 levels to a pathological profile
Sarah Lindsey	Aaron, this is the data that reminds me of your diabetic coronary data

Analia Loria	Sarah, does mitochondrial GPER expression show any sex differences in heart or vasculature?
Aaron Trask	Agree. In our model, however, I would argue that increased PWV is driven by a mild increase in BP.
Sarah Lindsey	Anna, that is a good question. In the high salt rat studies, the ovaries are intact. So we do show protective effects on vascular remodeling with G-1 even though the ovaries are intact
Sarah Lindsey	Hi Analia, GPER is in mitochondria and has been looked at in the heart mostly. I'm not sure if there are sex differences there.
Amy Arnold	Sarah, I know this talk focuses on vascular actions, but is there a role for GPER in the brain to regulate blood pressure?
Sarah Lindsey	Yes, I just emailed you about that Amy!
Annet Kirabo	Seems like arterial stiffness decreases later in white women...
Amy Arnold	Haha- sorry, I'm behind on emails!
Styliani Goulopoulou	Thanks to Dr. Sigmund and the programming committee for including Women's Health Research in the Recent Advances Sessions. Thanks to Drs. Rana and Lindsey for their great talks and THANK ALL OF YOU for engaging and making this session interactive!
Eric BelinDeChantemele	Sarah, any changes/compensation in other estrogen receptor expression in your KO model
Sarah Lindsey	Annet, yes I was glad they showed that sex effect. Also black women are least likely to take MHT. So really important to monitor in those px
Yagna Jarajapu	Thank you Sarah!
Curt Sigmund	Great talks! Applause, virtual.
Jane Reckelhoff	Great talks, Sarah and Sarosh! Thanks!
Amy Arnold	Great talks!
David Pollock	clap clap!
Yagna Jarajapu	Excellent talk...
Aaron Trask	Great talk Sarah!
Robert Carey	Absolutely terrific presentation!!
Noha Shawky	Great talks
Eman Gohar	Great talks
Donna Santillan	Great session!
Anna Stanhewicz	great session! thanks to all
Sarah Lindsey	Eric, we don't see increased ERa rna in the GPER ko
Eric BelinDeChantemele	great talk sarah thanks
Carmen DeMiguel	Excellent talk, Sarah!
Jasmina Varagic	Great talks Drs. Rana and Lindsey!

Mark Santillan	Thank you Sarosh, Stella, and Sarah!
Asako Mito	interesting! clap clap
Satoru Eguchi	Inspiring!
Annet Kirabo	Wonderful talk! Thank you. I was late. I had trouble getting in
Justin VanBeusecum	Good talks Drs. Rona and Lindsey!
Francisco Rios	Thanks. Nice presentation
Benard Ogola	Great talk Sarah!
Camilla Wenceslau	(thumbsup) great talk.
Sabrina Scroggins	I really enjoyed this session!
William Welch	Sarah thanks, learned a lot
Fernanda Priviero	Great talk!
Susan Keith	excellent and very well presented. Thank you!
Barbara Alexander	Great Session!
Analia Loria	(thumbsup)
Dewan Majid	Good talk Sara! Applaud!
Emily Waigi	i liked this talk!
Augusto Montezano	thank you all. amazing talks
Eric BelinDeChantemele	Great session. Thank you Drs Linsey and Rana
Shathiyah Kulandavelu	Great talks. Thank you.
Liliya Yamaleyeva	Great presentation, Sarah!
Sarah Lindsey	Thank you!
Karen Griffin	Fantastic! Looking forward to future work from this lab!!
Thiago BruderNascimento	very nice talk Sarah! clap clap!
Thu Le	Great talks. Thank you!
Michelle Gumz	Great session!! Thank you!
Bruna Visniauskas	Great talk, Sarah
Oluwatobiloba Osikoya	Enjoyable talks, thank you both!!!
Jessica Faulkner	Excellent session, thank you!
Megan Rhoads	Wonderful session!! Great talks by Drs. Rana and Lindsey!
Gary Pierce	Great talk Dr. Lindsey! The carotid PWV technique pretty cool. I think it actually is not a limitation because it is independent of BP!
Sarah Lindsey	Hi Gary, thanks and we think the same and hope it can be used clinically, esp in women!
Mohammed Nayeem	We missed whole session due to technical issues
Pamel Burrage	The presentations will be posted online to access about 2 hours after the session has ended.

Strategies for Getting Your Practice to Goal

name	message
Chris Sampson	Welcome! As you enter the player, you should hear music playing. If you do not, please click the Request Support button. Thank you and enjoy the conference!
Jeff Brettler	Good morning and welcome to all.
Jeff Brettler	I'm an internist from Kaiser Southern California and will be helping to moderate the session. Thanks in advance to the speakers. Looking forward to a very informative session.
Uche Iheme	As the STITCH and K-P experience studies were published prior to the more recent Hypertension treatment guidelines (ACC/AHA 2017), it would be interesting to know if they can be replicated to achieve control rates consistent with the current targets of <130/80
William Cushman	VA experience during 2000-2010 was similar to the Kaiser experience with BP control increasing from about 42% to 75%. No consistent algorithm was used, but EHR, free drugs (or similar co-pays), and performance measure/feedback were used. Following guidelines was encouraged. Algorithm may have led to even better results.
William Cushman	With the SPRINT algorithm (and monitoring, feedback, and free drugs), SBP control was 60% for SBP <120 and 80% <130 mm Hg.
Joseph Young	Kaiser Permanente encourages 2 week follow up after med titrations. Follow up is most often at a Medical Assistant BP check with results to PCP or in some cases to Ambulatory Pharmacist.
Jennifer Cluett	Good point re: high quality BP measurements.
Romsai Boonyasai	Thank you for this information, Dr. Cushman. I think this supports the concept that the main role of algorithms is to disseminate a standardized approach to a practice team. It probably is the content of the algorithm that determines outcomes.
Romsai Boonyasai	Available evidence does suggest that two week follow up improves outcomes over longer follow up times, but a lot of practices have found it challenging to achieve that goal. When working with those practices, we have encouraged incremental improvement: get from 3 month follow up to 6 week follow. Then work on getting to 4 week follow up, etc.
Matthew Sparks	what about telemedicine in these algorithms
Joseph Young	Based on ACCORD and SPRINT, AOBP is optimal for MA BP checks.
Jeff Brettler	same algorithm can be simply used with home or remote monitored BPs.
Romsai Boonyasai	@Matthew: that's a good question. Definitely something to work on in the coming months.
William Cushman	Nice lecture.
Matthew Sparks	I realize it is same... but are practices doing it
Romsai Boonyasai	@Joseph Young. I could not agree more.

Jeff Brettler	thanks Dr. Boonyasai for an excellent presentation
Matthew Sparks	can free up clinic space and be used to have quick followup
Lawrence Appel	A session, next year, on use of telemedicine to manage HTN would be useful. Major challenge is detecting HTN and screening.
Jennifer Cluett	Great talk, Dr. Boonyasai! Agreed that AOBP should be more widespread.
Lawrence Appel	Very nice talk Tony!
Roopa Shivashankar	Nice talk, thank you
Shari Bolen	Tony, great talk!
Uche Iheme	How have you dealt with the issue of disparate BP readings in different areas of large healthcare systems? There is anecdotal evidence that BPs taken in primary care offices tend to be lower than those taken at specialist clinics.
Eric Maclaughlin	Thanks for the great talk. I agree with the comment on difficulty with 2 week f/u, and I think that is a great reason to utilize telehealth and SMBP.
Sheila Scheuer	2 week followup is a great way to integrate pharmacists as well! At our family med clinic, the providers refer to PharmDs for followup in our cardiovascular clinic.
Eric Maclaughlin	Great comment Shelia. That is what we do as well.
Joseph Young	@Uche Iheme - anecdotally, technique outside of primary care less likely to be correct. Easy "repatriation" to primary care MA BP check if BP high in Specialty Care is essential.
Jeff Brettler	and ongoing BP measurement competency training in all areas of the health system
Uche Iheme	@joseph young. Thanks. A functional "repatriation" approach will be really great
Romsai Boonyasai	@Uche Iheme, we have seen similar variability working with 30 different practices in the RICH LIFE study. Our intervention involved standardized BPM training centered around AOBP. AOBP made it much easier for staff to consistently follow key aspects of BPM guidelines and decreased variability among sites.
Shari Bolen	Agree, we have allowed MAs in specialty clinics to schedule into our nurse hypertension visit schedule easily. Works well in an integrated health system.
Ross Tsuyuki	Another role of pharmacists could be prescribing antihypertensive meds
Steven YAROWS	competency programs have been tried for years by Grim and unfortunately in practices are not successful due to lack of resources
Sheila Scheuer	@RossTsuyuki Absolutely! That's what I do in my clinic under our providers and a collaborative practice agreement.

Eric Maclaughlin	@Ross - Absolutely. There are some difference in state, but most allow CMM (e.g., prescribing, ordering labs, etc.) for established patients under a signed protocol with physicians.
Ross Tsuyuki	we have independent prescribing in Alberta, Canada. have tested that in an RCT, too
Eric Maclaughlin	@Ross - I've your Alberta Clinical Trial In Optimizing Hypertension (RxACTION) study. Great paper that demonstrated significant improvements in achieving BP goals. Excellent paper (other interested see Circulation 2017 I believe)
William Cushman	Many people are not aware the Barbershop intervention didn't work until specially trained Pharmacists were titrating medications.
Eric Maclaughlin	Another great paper that was published after i recorded this lecture was by Karen Margolis et al. assessing CV events and costs with home BP telemonitoring and pharmacist management for uncontrolled HTN (see https://www.ahajournals.org/doi/epub/10.1161/HYPERTENSIONAHA.120.15492)
Eric Maclaughlin	@Bill - I wasn't aware of that either!
Romsai Boonyasai	@StevenYarrows competency trainings are insufficient by themselves, and knowledge/skills delay over time. But in the absence of a completely fool proof approach for measuring BP, I would argue that should still strive to incorporate BPM training into practice management.... And to simplify what we teach in order to minimize demands on limited resources.
Ross Tsuyuki	Thanks, the ref for RxACTION (indep pharm prescribing vs usual care) is https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.115.015464
Dave Dixon	Great job Eric
Ross Tsuyuki	for anyone interested, Hypertension Canada has developed a certification program for pharmacists in hypertension managment: www.hypertension.ca
Romsai Boonyasai	@William and @Eric, an AHRQ systematic review published by Walsh et al in the mid 2000s (?2007) specifically reported that team-based HTN management only seemed to be effective when the approach included a mechanism for medication titration by a non-physician team member. Unfortunately scope of practice means this is a PharmD or NP...
Jeff Brettler	Thanks Dr. MacLaughlin for a great talk.
Ross Tsuyuki	Thanks, great presentation, Dr. Maclaughlin
Eric Maclaughlin	Thanks all!
Romsai Boonyasai	Nice talk, Eric!
Sheila Scheuer	@Ross, thanks for the certification program info!

Dave Dixon	Of note, all 50 states have some degree of collaborative practice legislation for pharmacists to collaborate with physicians, and in some cases, advanced practice providers also.
Jan Basile	Keith, as good as ever! Thank you for this most important presentation. We miss Ron Victor!
Aimee Garza	excellent talk. well done!
Lawrence Appel	Keith, great talk. I learned a lot. Please discuss the resistance to use of pharmacists at part of a team to control HTN. We need to understand the opposition.
Joshua Samuels	Excellent
Uche Iheme	Excellent talk, Dr. Ferdinand, as always.
Jeff Brettler	Thanks Dr. Ferdinand for an outstanding presentation.
Romsai Boonyasai	Thank you, Dr. Ferdinand. I enjoyed your presentation.
Ross Tsuyuki	Thank you, Dr. Ferdinand. I really enjoyed that.
Annet Kirabo	Great talk Dr. Ferdinand! Thank you.
Romsai Boonyasai	@LarryAppel, I had been under the impression there are enough PharmDs for the amount of need, and that they are relatively expensive for most primary care settings. (We are unusually lucky at JHM, in that respect.) Is there more opposition to involving PharmDs beyond this?
Romsai Boonyasai	*are not enough PharmDs...
Lawrence Appel	Keith mentioned that there are legislative barriers. Usually that means there is organized opposition.
Jackson Wright	Keith: Great talk as usual. How do we address the economic disincentives for barber shops to have workflow interrupted by medical care? Might the provision of barbers on staff of community health centers/providers provide an alternative model?
Eric Maclaughlin	@Romasa - From my perspectives, I think it the issue of involving PharmDs more is multifactorial. Definitely agree that there are some legislative barriers, though as Dave pointed out most states allow some degree. The other piece though is reimbursement models. Pharmacists are not considered "health care providers" in the Social Security act, so reimbursement is difficult. We have to bill our services under physicians.
Dave Dixon	The primary legislative barrier has to do with pharmacist not being able to get reimbursed by CMS and other payers for clinical services, like other provider types.
Sheila Scheuer	PharmDs are not recognized at "providers" in many settings, so our reimbursement rate for visits is much lower than (in my opinion) it should be. Many times their role in these areas has to be justified with cost savings/time savings to other areas of the clinic.

Romsai Boonyasai	Thank you for this clarification. I had thought "relatively expensive" to mean their salaries are higher than a community health worker or care manager. But if they cannot bill for their services, it would only increase the gap. That's a shame, given the evidence supporting their involvement.
Steven YAROWS	I think the pharmacist issue is complex As a practicing Internist I feel that Pharmacies are actively competing with my practice They are offering services like vaccines etc, but have no continuity of care, give multiple dosages of the same vaccine, and do not work collaboratively with us. Walgreen's and CVS are actively employing PCP, or are attempting to do this. Lack of continuity of care means worse care. Again, I am biased
Lawrence Appel	So, a key issue is identifying a viable reimbursement model for team-based care, that often but not always includes pharmacists (i.e a positve deviation, per Sheri Boen).
Sheila Scheuer	Yes, reimbursement is definitely at the root of the issue, I think. I think it is now realized how much benefit a clinical pharmacist can provide within these teams otherwise.
Sheila Scheuer	@Steven -- I think the pharmacist's purpose in those outpatient settings is just to provide more access to vaccinations. Depending on the state, the pharmacy uploads their vaccinations into the immunization system so they can be referenced by the PCP, but I agree that the continuity of care is not the same as being seen in clinic. Side note, I've had experience working on both the retail side and now as a clinical pharmacist in a primary care clinic.
Sheila Scheuer	Also, the pharmacist should be referencing that same immunization system to see what the patient has already received (granted it has been uploaded by the clinic)... not saying this happens all the time though, just saying it should be.
Romsai Boonyasai	One of the challenges to using a positive deviance approach is that you have to have enough sites to identify positive deviants. Hats off to Dr. Bolen and her team for engaging so many practices successfully.
Steven YAROWS	should be and actually being practiced is markedly different in my experience I miss collaboration with my local pharmacist, which was the standard when I started practice. Now we are in a competition. Why does Medicare part D reimburse pharmacies better than PCP practices? I suspect a Lobby effect there
Shari Bolen	Yes, sometimes it is challenging to identify a best practice and practice facilitation could still be used to implement a best practice from the literature
Shari Bolen	That response was to Tony's commenty

Sheila Scheuer	I know it, that doesn't make sense. I agree. @Steven
Jeff Brettler	Thanks Dr. Bolen for an excellent talk.

Recent Advances Session 4: Links Between the Renin-angiotensin System and SARs-CoV-2 and COVID-19.

name	message
Chris Sampson	Welcome! As you enter the player, you should hear music playing. If you do not, please click the Request Support button. Thank you and enjoy the conference!
Swapnil Hiremath	Looking forward to this session. The best of Physiology and Epidemiology
Matthew Sparks	Hello everyone. This is Matt Sparks, Nephrologist and physician scientist at Duke University. I will be moderating (or attempting) to moderate the chat.
Nirupama Ramkumar	Hi Matt ! Look forward to this session
Matthew Sparks	We have put a limit on ACE2. Each participant can only mention 10 times. We are watching the chat closely to ensure this is adhered to.
Swapnil Hiremath	(thinking)
Daniel Batlle	Matt loves rules ! and I hate them
Jordana Cohen	Hah good luck with that, Matt :)
Swapnil Hiremath	ACE2 is very important for renal function regulation
Yagna Jarajapu	Good morning from Fargo ND
Jia Zhuo	Matt, give your take whether the presence of ACE2 in the kidney leads to kidney injury and failure during COVID-19 pandemic?
Dulce Casarini	Greetings from Sao Paulo, Brasil, Federal University of Sao Paulo, Dulce
Barbara Alexander	Is the limit on ACE2 based on power analysis? :)
Matthew Sparks	ha
Jia Zhuo	Hi good morning to everyone!
Megan Rhoads	Lol - I fear Matt has started a fun little competition in this session!
Yagna Jarajapu	I might exceed the limit.... sorry
Matthew Sparks	can't wait for this discussion
Joseph Haywood	Barbara, too many years on the IACUC...
Barbara Alexander	JR...yes!
Matthew Sparks	also. Renal, Baclofen, and any mention of HYGIA is forbidden
Atossa Niakan	Good morning from Memphis, looking forward to this talk
Michelle Gumz	Matt is this the right time to point out that RAAS has two As?
Matthew Sparks	Oh no. Aldosterone already
Andrew South	Dr. Sparks needs a buzzer

Matthew Sparks	@ACE2 in kidney leading to kidney injury. My take is that.... this is possible but extremely rare and majority of AKI is from sepsis and acute tubular injury and ACE2 IN THE KIDNEY is not a main driver of injury.
Matthew Sparks	hopeful for our review on ACKD that goes through ALL studies that look at SARS-CoV-2 in the kidney. Majority cannot find it. A few autopsy studies have.
Jia Zhuo	If the hypothesis that ACE2 is absolutely necessary for the COVID-19 virus to enter a host cell, then the presence of ACE is expected to cause kidney failure, whereas ACE2 inhibitors will effectively treat COVID-19 complications?
Matthew Sparks	This should be out soon. Also reviews all of the methodologies used to detect SARS-CoV-2 in one table
Dulce Casarini	The level of ACE2 is higher in females, older subjects, smokers, and subjects with cancer than in other subjects. Are these people at higher risk for the severe forms of COVID-19 when they are exposed to the SARS-Cov-2?
Matthew Sparks	They hypothesis are out there. However the emerging evidence is that RAS inhibitors are NOT modulating severity. The best evidence so far is BRACE-CORONA
Joseph Haywood	Are higher levels of ACE2 in these groups in all tissues?
Matthew Sparks	many of these studies are not looking the lungs and these studies are extrapolated. ALso many are animal models. I think we need to ensure that broad statements about ACE2 up/down regulation are carefully discussed.
Sarah Lindsey	Dulce, I thought this too but the literature does not support this in lungs of rodents. https://europepmc.org/article/med/16303146
Maria SequeiraLopez	Matt, why don't you let the speaker answer the questions? it looks like 2 independent events...
Sarah Lindsey	And this one too https://bsd.biomedcentral.com/articles/10.1186/2042-6410-1-6
Jia Zhuo	Me too, I don't find any convincing evidence to support the hypothesis yet even though COVID-19 has killed almost 200,000!
Dulce Casarini	thanks Sarah
Andrew South	There are many confounding factors and other sources of bias in human studies looking at ACE2 levels in these subgroups
Daniel Batlle	we showed that ace2 in the lungs is not affected by captopril or telmisatan in JASN recently
Usman Ashraf	Since ACE2 is the mode of entry for the virus what is the Renin and Aldosterone levels in COVID-19 patients are renin and aldosterone levels increased?
Daniel Batlle	no good data that I am aware of

Annet Kirabo	ACE2 is also expressed in APCs that contribute to the cytokine storm including IL-6 and TNF-alpha. I wonder how much of this is due to immune cell activation
Jacob Pruett	I may have missed this, but is this study for diabetic mice in both male and female mice?
Daniel Batlle	Annet , interferons can up regulate ACE2 yes
Annet Kirabo	Thanks Daniel.
Camilla Wenceslau	How is MAS receptor expression in the glomerular /kidney in diabetes?
Jia Zhuo	ACE2-KO, ACE2 inhibitors, or ACE2 siRNAs would be good approaches to test whether ACE2 is required for COVID-19 infection and its complications.
Daniel Batlle	problem is that rodent ace2 renders these animals resistant to SARS infection Jia
Francisco Rios	Hi Daniel, nice data. Do you know if there are differences in ACE2 activity and specificity between humans and mice?
Fernando Elijovich	the modest beneficial effect of overexpressing ACE2 in the kidney is probably due to the fact that the enzyme responsible for most Ang1-7 synthesis in the kidney is neprilysin, not ACE2
Dewan Majid	ACE2 decreases in diabetes, however, Diabetic patients seems to be more susceptible for COVID -19. Any comments?
Jia Zhuo	Dan, try the primate model
Curt Sigmund	There are now numerous papers describing the tropism of ACE2 and other proteases in many tissues using single cell sequencing approaches in COVID-19.
Daniel Batlle	they differ totally regarding SARS infectivity Francisco
Curt Sigmund	There are also many humanized mouse models with human ACE2 where virus infection has been studied. Extensive and growing literature both formally published and in the pre-print form.
Sarah Lindsey	There is a humanized ACE2 mouse model that is suceptible to COVID
Daniel Batlle	need $$$$$$ Jia
Sarah Lindsey	What he said. (upsidedown)
David Harrison	Viruses also enter cells via the interaction of Axl on target cells with GAS6 on the surface of apoptotic virus infected cells. This is well established for H1N1. No one knows how important this is for Coronaviruses or its role vs. ACE2.
Patricio Araos	some patients debut with diabetes when they become infected with Sars-COV2, some publications indicate that the virus would have another receptor (DPP4) independent of ACE2. In these animals have DPP4 levels or gliptins been measured?
David Harrison	There is an ACE2 expressing mouse
Annet Kirabo	I couldn't agree more, Fernando about NEP. And how about chimase, produced by APCs which could also play a role?

Daniel Batlle	yes we are using these mod els Curt
Jia Zhuo	Dan, ask Dr. Fauci
Dulce Casarini	Do the natural genetic polymorphism in human ACE2 gene and/or protein influence their attachment with SARS-CoV-2 spike? protein?
Daniel Batlle	good point David , I know little about this
Curt Sigmund	There is a great study of extensive mutational analysis of ACE2 and its binding with spike protein.
Daniel Batlle	receptors other than ace2 are poorly studied but worthy of more attention Patricio
Thu Le	I believe Curt is referencing the paper in Cell in April 2020. Great paper.
Curt Sigmund	(thumbsup)
Patricio Araos	(thumbsup)
Jia Zhuo	Dan, fantastic talk!
Daniel Batlle	I do not have specific information on this Dulcie
Bina Joe	Also this:
Daria Golosova	(thumbsup) Great Talk! thank you!
Bina Joe	https://www.nature.com/articles/s41431-020-0691-z
Augusto Montezano	Dr Battle - Is it known if ACE2 interacts with other proteins in kidney cells as it does in intestine epithelial cells?
MichaelAnthony DelaCruz	������
Mohammed Nayeem	I certainly believe it!
Daniel Batlle	what kind of intestinal proteins
Jia Zhuo	If all of these are true, ACE2 should be targeted to prevent and treat COVID-19 pandemic
Augusto Montezano	The aminoacid transporter
Augusto Montezano	B0AT1
Daniel Batlle	collection is also in the kidney and is an analogue of ace2 that is not active enzymatically
Daniel Batlle	I meant to say collection sorry
Yagna Jarajapu	Collectrin!
Thu Le	I can comment on collectrin since we've been working on it
Augusto Montezano	Thank you
Thu Le	it is thought that ACE-2 is a chimera of ACE and collectrin

Daniel Batlle	yes , the spelling ...
Rhian Touyz	Dan do you think the
Thu Le	colletrin functions as an amino acid transporter chaperone
Thu Le	it has no enzymatic domain
Thu Le	by itself it does not function as a transporter
Rhian Touyz	Dan do you think virus-ACE2 interaction has cellular effects beyond inducing replication?
Daniel Batlle	thank you Thu
Jia Zhuo	Dan, human kidney organoids are interesting and translational
Daniel Batlle	tell NIH ..
Jia Zhuo	Again, ask Dr. Fauci for the money! Dan
Joseph Galley	Would it be possible to target SARS-CoV2 with a small peptide sequence of ACE2 known to interact with the viral spike proteins?
Catherine LlorensCortes	in mice KO for TMPRSS2 does ACE2 internalize together with COVID 19
Matthew Sparks	you are welcome
Catherine LlorensCortes	in KO mice for TMPRSS2, does ACE2 internalize with COVID19
Robert Speth	I made this argument against using Ang II as a vasopressor in a Critical Care commentary earlier this year.
Daniel Batlle	people are likely working on this approach Joseph
Joseph Galley	(thumbsup)
Daniel Batlle	I do not know Catherine
Daniel Batlle	it was a great feature Bob !
Matthew Sparks	https://www.sciencedirect.com/science/article/pii/S0092867420302294
Matthew Sparks	this used inhibior of TMPRSS2 but not KO
Matthew Sparks	Fantastic job Dan. Really deep dive into ACE2 and SARS-CoV-2. Thank you.
Robert Speth	is anyone pursuing ACE2 619 as the sACE2 therapy?
Rhian Touyz	Excellent presentation - thanks Dan
Lisa Fortesschramm	greatly appreciate this talk!
Robert Speth	great presentation
Curt Sigmund	Thank you Dan, great talk.
Matthew Sparks	Welcome Jordy. We are looking forward to your talk.
Robert Carey	Dan, outstanding talk!
Dulce Casarini	Excellent presentation thanks
Andrew South	Wonderful talk, Dr. Batlle, thank you.
Catherine LlorensCortes	In presence or absence of MLN4760 is the binding of SarsCov2 to ACE2 is identical?

Johannes Stegbauer	Great presentation and very interesting chat. Thanks!
Jordana Cohen	Thanks, Matt! Great talk, Dan!! Thank you to the organizers for the opportunity to speak on this important topic!
Daniel Batlle	we are working on this Bob
Karen Griffin	Thank you Dan - Enlightening as usual!
Sumit Monu	It would have been great if 5 minute gap could be allowed between the presentation because it takes time to think about the whole presentation and then ask relevant questions. Just a thought
Yagna Jarajapu	Thank you Dan.
Daniel Batlle	MLN does not affect the binding Catherine
Joseph Galley	Great Talk, Dr. Battle!
Karen Griffin	Yes Sumit and is something we will see about doing next year if virtual again.
Sumit Monu	Thanks Dr.Griffin. hope its not virtual again next year though.
Karen Griffin	Hope Springs Eternal……..
Daniel Batlle	thank you all for the active participation !
Daniel Batlle	I wish I could type faster by the way !
Catherine LlorensCortes	Great presentation Daniel
Jia Zhuo	Is there any cause and effect relationship between hypertension and the COVID-19 infection?
Usman Ashraf	Is there any data showing the levels of ACE2 in children compared to adults
Jordana Cohen	@Zhuo I'll get at the more recent clinical research evidence in the next few slides :). Physiologically, I'm not aware of convincing evidence that we would unequivocally expect higher risk of COVID-19 in patients with hypertension (other than due to older mean age)
Sarah Lindsey	Do the levels of ACE2 even matter if it's after you've been infected and it's already in the cells?
Jordana Cohen	@Usman I defer to my colleague Andrew South if he is on the chat -- I am not sure
Jia Zhuo	Thank you.
Daniel Batlle	they probably matter less but to be sure you want to intercept the virus for continued entry Sarah
Sumit Monu	Thanks Dr.Zhuo for that question
Camilla Wenceslau	Dr. Cohen, do you know any study about changes in Mas receptor in animals/patients with Covid19?
Annet Kirabo	Sarah, unless there is potential that ACE2 is involved in replication and reinfection
Nitin Kumar	Are there any evidence of SARS-CoV2 binding to the ACE2 of lung endothelial cells in addition to lung epithelial cells?

Andrew South	Dr. Ashraf @Usman, great question. Data in children are scant compared to adults, especially in the lung. As with healthy adults compared to those with CKD, cardiovascular disease, etc, in general there is appropriate balance b/w ACE/Ang II and ACE2/Ang-(1-7) pathways in children. See our recent review specific to this question in Hypertension:
Andrew South	https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.120.15291?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed
Jordana Cohen	Dr. Wenceslau, I'm only aware of papers calling to research this, not of any that have done it using appropriate methods
Camilla Wenceslau	thank you
HanNaung Tun	Nice talk.
Usman Ashraf	Thank You
Jia Zhuo	Aging is associated with all kinds of diseases and a risk factor for catching common flu too
Jordana Cohen	Yes, completely agree Dr. Zhuo
Jordana Cohen	Of note, to those who may not be aware, BRACE CORONA announced their results at ESC last week -- they found no difference in continuing vs. stopping ACEI vs. ARBs in people hospitalized with COVID-19 with regard to days alive and out of the hospital at 28 days. The trial had some limitations, but is the best evidence we have so far
Jia Zhuo	Great analysis and talk, Jordana!
Jordana Cohen	Thank you! We will probably run over (I think things were delayed/my talk didn't start until 10:40, so will probably end 10-15 min late)
Fernando Elijovich	What kind of evidence would make it doubtfully ethical to continue testing discontinuation of RAS blockers?
Patricio Araos	Sars-cov2 patients (not hypertensive) have higher plasma levels of AngII versus healthy patients. Are there studies where AngII levels are measured in hypertensive patients vs antihypertensive patients infected with Sars-cov2?
Annet Kirabo	Great talk Jordana! I wonder how much has changed since when you pre-recorded this talk
James Luther	Fernando- ACEi and ARBs are often stopped by clinicians in setting of acute illness. For many it is standard of care to use "sick days". Arguments can be made on either side but calling it unethical?
Fernando Elijovich	I am talking about discontinuation because of an etiology, not because of usual hemodynamic reasons
Matthew Sparks	this research letter from Kintscher et al in Hypertension
Matthew Sparks	https://www.ahajournals.org/doi/10.1161/HYPERTENSIONAHA.120.15841
James Luther	Fernando I agree it is something that should be studied in a trial.

Robert Speth	evidence is increasing to support use of ARBs with COVID-19 Perez Speth Saavedra medrXiv
Andrew South	Dr. Araos @Patricio, there are no definitive studies measuring Ang II levels in patients w/ SARS-CoV-2; the few that have been published have methodological limitations in sample collection and assays used as well as clinical/epi study design. Cannot yet draw conclusions from them. Other studies pending...
Annet Kirabo	Matt, non-clinician here wondering why ACEi and ARBs are stopped in acute illness
Jordana Cohen	Fernando, I agree with Matt Luther -- we had a DSMB closely monitoring our trial. These medications are often held/not continued in hospitalized patients, so it required safety monitoring for that reason (the opposite of what i think you're alluding to)
Matthew Sparks	Primarily it is for low blood pressure
Kailash Pandey	Jordana it's great talk! thank you.
Daniel Batlle	good point Andrew
Matthew Sparks	Stopping RAS... also hyperkalemia.. and many stop for AKI
Matthew Sparks	Which is why it is VERY hard to study this without randomization... because sick patients usually are stopped (low BP, high K, AKI)
Annet Kirabo	Thank you.
Patricio Araos	Thank you Dr, Andrew i am agree with you, however, it would be interesting to know what happens in hypertensive patients with and without treatment regarding AngII levels
Jordana Cohen	Exactly, Annet -- these were reasons that we excluded people from participating in our trial (hypotension, hyperkalemia, AKI). Only people could be included who did not have a contraindication to continuing these meds if they were assigned to
Atul Bali	@Dr. Sparks - Agree completely. I think there is a good argument NOT to stop baseline ACE-I/ARB in acute CHF exacerbation. However, most clinicians would question the decision not to stop with AKI in sepsis (COVID-19 related, or otherwise).
Jordana Cohen	Yes, Atul, completely agree. This is why we excluded people with HFrEF
James Luther	Many people have made up their minds on both sides of this issue- the exact reason that trials are needed
James Luther	speak faster Jordy
Matthew Sparks	Jordy... 2X
Andrew South	Agreed Dr. Araos. Same with other RAAS components. These studies, some with excellent methods, are ongoing...
Dewan Majid	Chat activities may be halted during presentation - it distracted others to concentrate listening the presentations!
Patricio Araos	(surprise)
Cecilia Portugal	Dr. Cohen, Great presentation, Thank you!

James Luther	Dewan- Options...Fullscreen Content will remove the chat from your view.
Jordana Cohen	Update: we're not sure if the study was terminated -- there is not a lot information about what was reported/why
Jia Zhuo	I like your the 1st point in your summary!
Daniel Batlle	very comprehensive overview , excellent Jordy !
Matthew Sparks	Fantastic Talk Jordy. Really important session. Very much appreciate both you and Dan taking time to present to us (and answer our questions)
Andrew South	Thank you Dr. Cohen. Excellent talk.
Matthew Sparks	Thanks to everyone for joining and participating in the chat.
Jordana Cohen	Thank you everyone for the interesting discussion!
Patricio Araos	Thank you Dr. Cohen. Excellent talk
Melis Sahinoz	Great talk Dr. Cohen, thank you.
Annet Kirabo	Wonderful talk! Thank you!
Robert Speth	100% agreement !
Curt Sigmund	Great talk Dr. Cohen. Incredible!
Sabrina Scroggins	@Jordana Cohen Thank you for your excellent talk!
Annet Kirabo	what is the twitter handle?
Jan Basile	Thank you for all of the work you put into this.
Lama Ghazi	Awesome talk, thank you for reinforcing that we should pay attention to methods and not just skim through them ...
Augusto Montezano	amazing talk Dr Cohen. Thank you!
Jordana Cohen	@jordy_bc
Jacob Pruett	Thank you so much! Enlightening talk!
Jordana Cohen	#Hypertension20
Lisa Fortesschramm	love the caution for balance and not just reading the paper titles in your presentation
Megan Suter	Really excellent talk!

Hypertension Quality Metrics that Matter

name	message
Chris Sampson	Welcome! As you enter the player, you should hear music playing. If you do not, please click the Request Support button. Thank you and enjoy the conference!
Atul Bali	The Target: BP program also advocates for the MAP pathway. I have personally benefited from the resources they have on their website.
Atul Bali	Dr. Fontil - is there an online resource where someone could review sample clinical decision making protocols which they could tailor for their own practice? Eg. BP treatment protocol, ABPM protocol etc.?

Romsai Boonyasai	From a clinician's perspective, balancing Validity against Feasibility has been the main challenge. We track what can easily be obtained from claims, but often that does not fully capture the nuances of real world practice (e.g., "having a protocol" vs "using the protocol correctly"). What are your thoughts on metrics based on electronic metadata from the EHR?
Romsai Boonyasai	I guess you just answered my question! Can you say more about what the challenges of tracking med changes in the EHR are? At a superficial level it seems like automating the chart review process, but I'm sure it's much more complicated than that.
Kathryn Foti	@Dr. Bali- Million Hearts has a BP treatment protocol which you can modify for your own use: https://millionhearts.hhs.gov/tools-protocols/protocols.html#htp
Atul Bali	@Dr. Foti - This is excellent, and easy to customize too. Thank you!
Uche Iheme	(thumbsup)
Mahboob Rahman	In large heath care systems, how can you account where the BP was measured...for example a surgeons office may measure BP but not necessarily act on it
Romsai Boonyasai	@Mahboob If a large health system uses a single EHR, I suppose one would restrict to BPs recorded in specific departments (e.g., Internal Medicine or Family Medicine). However, I don't know if payment policy prohibits using this for the purposes of financial incentives/penalties.
Atul Bali	@Dr. Rahman - Great point. I have found a similar challenge in our system. I intend to educate offices that do not treat BP, to - 1. Measure it accurately. 2. Repeat it at the end of the office visit if BP was elevated (to avoid the rushed BP reading that is often misleading). 3. Have a direct mechanism in place for them to set up a HTN only visit with their PCP.
Mahboob Rahman	Thanks, Atul and Romsai
Romsai Boonyasai	Re: using "confirmatory BP<
Joseph Young	AOBP as initial BP or if initial standard BP is high is an excellent mechanism to measure BP accurately before the patient is seen by Physician.
Kathryn Foti	I would love to better understand the extend to which health systems have (and use) standardized measurement and treatment protocols, but don't know of a good way to assess this other than perhaps surveys and I'm not sure what kind of response rate you would get. Any ideas?
Romsai Boonyasai	Re: using confirmatory BPM, we found that in some practices, PCPs repeated BP measurements that they did not like (usually BPs that are high) and that they tended to repeat readings using manual technique instead of AOBP. As a result, 2nd readings had higher terminal digit preference than the first readings (obtained by MAs).

Romsai Boonyasai	I would love to see a measure that assesses "uses AOBP as intended" even if there is only one reading recorded.
Romsai Boonyasai	@JosephYoung - agree completely!
Stephen Juraschek	completely agree, re: AOBP!
Mahboob Rahman	Stephen...very nice paper in the Annals!

The Excellence Award for Hypertension Research; Presentation of the Irvine Page & Alva Bradley Lifetime Achievement Award and The Marvin Moser Clinical Hypertension Award

name	message
Chris Sampson	Welcome! As you enter the player, you should hear music playing. If you do not, please click the Request Support button. Thank you and enjoy the conference!
Daichi Shimbo	Welcome everyone.
Mahboob Rahman	Great meeting so far Daichi
Daichi Shimbo	Thank you @MR (thumbsup)
Bruce Alpert	Daichi, the Yankees better shape up and win 10 in a row!!!
Daichi Shimbo	Bruce. (thumbsup)
Atul Bali	Wow.. the previous session was top notch.
Joshua Samuels	All have been
Spencer Cushen	Hi Dr. Samuels!
Patrick Pagano	Agreed, about last session!
Susan Kunish	Being introduced by Dr Murray Esler. Thank you Dr Esler
Lauren Rowell	Thank you, Susan.
Mahboob Rahman	Is this live or recorded
Curt Sigmund	Recorded.
Mahboob Rahman	thanks
Stephen Juraschek	Such important work!
Bruce Alpert	Is there a way to get a copy of these slides??? They are AMAZING
Sumit Monu	you can click on resources and download it
Mahboob Rahman	privilege to hear a master in the field
Joseph Flynn	Truly outstanding talk, what a body of work!
Karen Griffin	Of great clinical interest!
Joseph Galley	Bruce, if you click on the resources tab below, the pdf of the slideshow is available
Bruce Alpert	thanx
Mohammed Nayeem	The morning session we missed because of technical issues, can we have access later to watch that portion?
Joseph Galley	(thumbsup)
Daichi Shimbo	you willl be able to access all prior talks for 90 dates after the initial presentation.

Daichi Shimbo	you have to wait a few hours though before it is available.
Curt Sigmund	All sessions are available ON DEMAND for 90 days. They become available about 2 hours after.
Mohammed Nayeem	Great!!
Lisa Fortesschramm	more evidence that some pts may benefit from bedtime dosing of htn meds
JMichael Wyss	Curt, given the resolution of the video, might it be useful to have the actual ppt files available. Giuseppe's slides are better and relatively easy to read, but others have not been very readable and clear,
Susan Kunish	All talks from this morning are available now
Atul Bali	Dr. Wyss - Click on the "Resources" tab just below this chat window - you will find a link to a PDF version of this slideshow.
Mohammed Nayeem	Yes, I agree, slides were not visible
Lisa Fortesschramm	@JMichael click the resources tab below the chat. the ppt is there. it's also included for most of the talks in the ondemand section of the site
JMichael Wyss	Thanks,
Joseph Galley	Excellent talk, Dr. Mancia!
Daichi Shimbo	There is data to suggest that the white coat HT (surrogate) is explained in part by conditioning to the the clinic environment (not just the clinical taking the office BP).
Daichi Shimbo	*clinician
Curt Sigmund	Let’s congratulate Dr. Mancia for his exceptional lecture and for being the recipient of the 2020 Excellence Award in Hypertension.
Andrew South	Thank you so much, Dr. Mancia. Truly enlightening work.
Stephen Juraschek	Thank you, Prof Mancia!
Bruce Alpert	WOW!!! WOW!!! WOW!!!
Daichi Shimbo	Congrats Dr. Mancia!!!
Carmen DeMiguel	Thank you Dr. Mancia! What a great talk!
Lisa Fortesschramm	Congratulations, Dr. Mancia! Well-deserved, and your presentation was incredible
Beverly Green	great presentation, much deserved award!
Jan Basile	Congratulations for a lifetime of work that you continue to do through the Journal of Hypertension. Bravo!
Eman Gohar	great talk!
Ines Armando	Thank you Dr. Mancia, great talk
Allen Cowley	A well deserved award. Thank you for your many contributions!
Uche Iheme	congratulations, Dr. Mancia
Stephen Juraschek	Congratulations, Dr. Wright!!!
Robert Carey	Giuseppe, congratulations for an outstanding lecture by a truly extraordinary scientist and leader!

JMichael Wyss	Congratulations, a well deserved and overdue award. great lecture. Mike
Atul Bali	Dr. Mancia - Thank you for sharing your wisdom, and many congratulations!
Karen Griffin	Thank you, Dr. Mancia for this State-of-the-Art presentation! Congratulations on receiving this Award. Well-Deserved!!
Eric Maclaughlin	Thank you for the excellent lecture @Dr. Mancia and congratulations.
Eric Maclaughlin	Congrats @Jackson! Well-deserved!
Daichi Shimbo	Congrats!!!!
Jordana Cohen	Congratulations, Dr. Wright!!!
Jan Basile	Congrats, Jack! It was a pleasure learning from you at MCV-VCU as a student, and it has been a pleasure to have worked with you throughout our clinical trial careers. Well deserved.
Addison Taylor	Congratulations on a well-deserved and long overdue award!
Anika Hines	Congratulations!!!
Karen Griffin	Landmark work, Dr. Wright! Congratulations!!
Barry Davis	Congratulations!
Lawrence Appel	Congratulations Jackson! It is a privilege to be your colleague and friend.
Andrew South	A privilege to hear you speak and learn about your career, Dr. Wright. Congratulations.
Annet Kirabo	Congratulations Dr. Wright!
Atossa Niakan	Congratulations Dr. Wright!
Styliani Goulopoulou	Congratulations, Dr. Wright. Your work has made a great impact!
Daichi Shimbo	Well deserved!
Anika Hines	Thank you, Dr. Wright!
Stephen Juraschek	What a powerful legacy. Thank you, Dr. Wright!
Carmen DeMiguel	Congratulations Dr. Wright!
Mahboob Rahman	A lifetime of excellence...thanks for everything JTW!!
Brandi Wynne	Congrats Dr. Wright!
Uche Iheme	Congratulations, Dr. Wright. I cannot thank you enough for being a role model to many of us all these years.
Camilla Wenceslau	Great talk! Congratulations Dr. Wright, well deserved!
William Cushman	Congratulations, Jackson. Very well deserved! It's been a pleasure to work with you for almost 30 years.
Lisa Fortesschramm	Dr. Wright, thank you for highlighting racial disparities, and congratulations!
Ines Armando	Congratulations Drs Wright and Bidani!
Curt Sigmund	Congratulations to Drs. Wright and Bidani.

Curt Sigmund	Please join us at 8:50 AM (USA Central Time) tomorrow for the COH/KCVD Awards Session during which the Corcoran, Dahl, Dustan, Seldin, Mid-Career, and Goldblatt Award Lectures will be presented.
Kenneth Mitchell	Congratulations Anil!!!
Anika Hines	Congratulations, Dr. Bidani!
Hana Itani	Congratulations!!
Dewan Majid	Congratulation Dr. Bidani! Well deserved recognition!
Josephine Amadi	Congratulations!
Tianxin Yang	Congratulations, Dr. Bidani!
Annet Kirabo	Congratulations Dr. Bidani!
Justin VanBeusecum	Congratulations Dr. Bidani!
Carmen DeMiguel	Congratulations Dr. Bidani! Thank you for your tremendous contributions to hypertension research!
Stephanie Watts	Dr. Bidani, Bravo
Jan Basile	Anil, congratulations! So many years at ASH and now the COH. A lifetime of success wherever you have been.
Anil Bidani	Thank you, Everyone!!
Sumit Monu	Congratulations Dr.Bidani. Always a pleasure to discuss science with you.
David Pollock	Congrats, Anil!! So happy for you.
Brandi Wynne	Congrats Dr. Bidani!
Stephen Juraschek	Congratulations!