LeeAnn Mandarino	Questions for Dr. Ritter?
Dylan Wint	Is ASL available clinically?
Emily Bain	Does covid exposure influence progression
Janusz Alex	Does cognitive reserve really slow progression AD or does reserve just cover symptoms?
Khazan Tanya	comment on early onset AD
Wise Patricia	Does history of chemo such as for breast cancer increase these brain changes on the Alzheimer's continum?
Satyavolu Durga	what kind of cognitive tool do you recommend for AD screening?
Richard Manrique	Does regenerative medicine have any studies on preserving beta function?
Smith Leonard	If insurance does not pay for amyloid or tau scans,can they be paid for privately? How expensive? Helpful or not?
Saeed Shahidsalles	The Amyvid test in Atlanta costs $19200.00
LeeAnn Mandarino	Questions for Dr. Hua?
Ghazi Saidi Ladan	Are there any known risk factors for MS?
Ghazi Saidi Ladan	What cognitive symptoms are the most common in MS?
Walter Kozachuk	What is the contribution of the gut microbiome to the etiology of multiple sclerosis or the progression?
Tabbaa Mutaz	is abdominal pain is a common smtomp in ms
Farrington Leonie	can you discuss the impact of dietary modifications on autoimmunity. many thanks
Burke Deborah	Medications targeting B cells vs T cells? affecting BTK
Abbott Matthew	Are there serum markers for the diagnosis of autoimmune encephalitis? or a panel?
Tabbaa Mutaz	Dose covid cause MS flare up
Van Keuren Cynthia	Are you seeing a relationship between COVID vaccinations and MS flares?
Janusz Alex	Have you found that the recent infusion disease modifying therapies caused greater systemic impairment?
Hua Le	**Abdominal pain itself is not common. More commonly patients has decreased gut motility leading to constipation or gastroparesis.**
Hua Le	**Some patient may have abdominal spasms. Another subset of patients have what is called the "MS hug", which is a banding sensation that can cause discomfort.**
Hua Le	**There has not been any diet that has been shown to directly protect from MS relapses or MRI activity. However, improved diet will likely reduce chronic inflammation and improve certain comorbidities (particularly vascular risk factors - HTN, DM, obestity) which will reduce risk of disability.**
Hua Le	**In our practice, we recommend the Mediterranean diet, which has studies supporting improve cardiovascular health. Other diets do not have sufficient evidence to recommend and is difficult for patient's to maintain over their lifetime.**
Nelson William	Fort Dr Ritter - what if any supplements do you recommend prevent cognitve decline, in general or AD ?
Hua Le	**Unfortunately, the focus of our discussion today was not treatment of MS specificically. BTKi are definitely an exciting development in the treatment of MS and current phase 3 studies are underway and actively recruiting..**
Hua Le	**In cases where autoimmune encephalitis is suspected, we would recommend check both serum and CSF markers for autoantibodies. Mayo has several panels that can be utilized based on the primary symptoms.**

Aaron Ritter	**The science around supplements for preventing cognitive decline is still evolving. In general, supplements, diet, and lifestyle to reduce inflammation. It seems to be the driver of synaptic dysfunction. So vitamin E, b12, etc.**
Hua Le	**Any illness or infection can cause transient worsening of MS symptoms, which we consider a "pseudo-relapse". Treatment of the underlying infection is paramount. The symptoms will resolve with time, but it may take a few weeks. Covid19 infection would be no different, and commonly pts will report worsening of their MS symptoms.**
Hua Le	**With vaccines, including COVDI19 vaccines, patients may experience a transient worsening of their MS symptoms. This will resolved and generally much quicker than if they were to have a COVID19 infection. The benefits of Covdi19 vaccine, and inactive vaccines will outweigh risks of vaccines in most cases.**
Burke Deborah	Looking at your DaTscans, it appears that being on levodopa affects the results of the study.... is this so?
Tabbaa Mutaz	when do you order DA scan ?
Burke Deborah	When else do you see a false negative DaT? Noted your comment about MSA
Hua Le	**@Janus Alex, I'm not sure I understand your question. In my experience, most patients feel better once treatment is started. But we would not expect improvement. DMTs are meant to be preventative for further relapes and disability. Some patients may not tolerate infusion and thus need a different DMT.**
Zuckerman Perry	In a patient on an antipsychotic, how do you differentiate Tardive Dyskinesia from another Movement Disorder?
Zoltan Mari	**Several medications have the potential to minimally affect DaT, but it unlikely to affect clinical verdict.**
Safai-Nili Firouzeh	Can you comment on bulbar type of parkinson
Manzoor Bhatti	how do you distinguish lewy body disease dementia from others clinically
Janusz Alex	Progressive Supranuclear Palsy: horizontal or vertical eye movement palsy?
Zoltan Mari	**LDB, by definition should produce "clinically significant" neuropsychiatric disabilities/symptoms (such as dementia, hallucinations, psychosis) WITHIN 1 year of the onset of motor parkinsonism**
Zoltan Mari	**PSP: the first extraocular movement abnormality is typically downward gaze palsy**
Zoltan Mari	**so it is primarily vertical, downgaze**
Zoltan Mari	**But in more advanced stages EOMs in all dimensions and directions will be affected**
Dylan Wint	**the first ocular movement abnormality can be slowed or delayed voluntary saccaded**
Zoltan Mari	**yes, slow EOMs are often precede range limitations**
Janusz Alex	Do we have disease modifying therapy is very early treatment useful?
Zoltan Mari	**no disease modifying treatments have been proven/approved (yet)**
Tretjak Ziga	Belared hello from Austin, TX
Gross Michael	Treatments for essential tremor?
Zoltan Mari	**For essential tremor, we have both medications, non-medical therapy (occupational therapy - including the use of strings, splints, heavy utensils and tools, even those with a gyroscope), and advanced treatments (such as DBS & MRgFUS)**
Zoltan Mari	**Out of the medications, we have so-called "first line" drugs, which include primidone and propranolol and a bunch of others, including topiramate, benzodiazepines, and others**
Abbott Matthew	is there a role for neuroplasticity exercises for protection of progression in any of the diseases discussed?
Calabrese Beverly	Do any OTC nootropic supplements or "eye vitamins" actually work?

Zoltan Mari	**The exact mechanism through which exercise seems to modify disease isn't completely known. While many studies in almost every major neurodegenerative disease have demonstrated what appears to be disease modifying benefits of exercise, many questions remain. (1) what kind of exercise and how much? (2) the matter of proper control is almost unresolvable, from the trial design standpoint. (3) if exercise benefits represent lasting, permanent modification of the disease's underlying pathology OR it is "just" a practice effect that is based on conditioning and more efficient engaging of the motor and musculoskeletal systems.**
Tabbaa Mutaz	what causes adutiray hallucinations ?
Tabbaa Mutaz	what cause pain in PD
Zoltan Mari	**the root cause of auditory hallucinations or its exact mechanisms aren't fully known. It is believed that the mesolimbic (dopamine) circuitry plays a central role**
Janusz Alex	Are you recomending sensory screening once neurodegenerative diagnosis is made?
Zuckerman Perry	Hello Dr. Wint, Perhaps you could answer my question about differentiating Tardive Dyskinesia from other Movement Disorders?
Zoltan Mari	**We don't believe PD causes pain in a direct manner, but central pain processing/relay centers tend to be over-tuned and may enhance pain sensations that are otherwise caused by unrelated pathologies (such as degenerative joint disease of the spine, etc) - another mechanism relates to the body's loss of its ability to appropriately fine-tune and adjust muscle tone to optimze it in response to noxious stimuli - due to the lack of such compensation, musculoskeletal pain won't be physiologically compensated for or addressed by changing muscle activity like would be the case in a non-PD individual, which, in turn, may enhance pains**
Zoltan Mari	**Sensory system review is very important and also sensory examinatino as part of the standard neurological exam**
John Lanzillotta	Dementia and difficlty in facial recogntion , relared to visual pathway pathology?
John Lanzillotta	related?
Zoltan Mari	**Yes, related, it is likely a multifactorial and complex matter**
Zoltan Mari	**Dear Crabb, it does appear that the echo may be coming from your system - it seems like we don't have anyone else who is reporting echo problems...**
Hua Le	**@ John Lanzillotta, yes impairments in facial recognition is thought to be due to impairments in higher level cortical processing of visual information.**
Hua Le	**In the resource files, slides are available, and I've included extra slides so the tables are a bit easier to see. It's part of the top-down and bottom up processing impairments.**
Manzoor Bhatti	how to manage hypertension when lying bp is super high and standing is very low?
Zoltan Mari	**It can be definitely one of the greatest challenges we face, when lying BP is sky high, while the patient still suffers nOH**
Zoltan Mari	**one thing is to make sure they sleep on a wedge**
Zoltan Mari	**BP follows a circadian pattern in which the highest readings are around the early morning hours before one wakes up**
Zoltan Mari	**sleeping on a wedge can lower intracrainal pressure, which will reduce the Cushing rerflex, and can prevent the BP to go extremely high at that time**
Zoltan Mari	**another good method is exercise and especially strength exercise to the leg, especially the lower leg (sitting leg raise with weights is safe and works on the calves)**
Zoltan Mari	**finally, allowing sitting/lying BP to be moderately high will often freak out PCPs & cardiologists, but could be acceptable to a certain extent, as disability and health risk linked to a BP say 155/90 sitting/lying is far less than when one passes out when standing**
Laura Marcu-Buck	Besides speech therapy is there any other treatment for dysphagia
Walter Kozachuk	Can oxybutinin induce or increase the cognitive dysfunction in Parkinson's?
Lopezwarren Yvette	are there combinations of autonomic sx that can be early soft signs of parkinsons? if so, when should patients be referred?
Safai-Nili Firouzeh	Does Dopa help with dysphagia
Burke Deborah	how much can dysphagia be improved with ST?
Zoltan Mari	**Oxybutynin, a relatively small (357 kDa), highly lipophilic molecule can readily cross the bloodâ€“brain barrier and can affect cognition**
Abbott Matthew	is atelectasis common, even if not bedridden, due to lack of occasional full tidal volume?

Zoltan Mari	**dysphagia needs proper workup, to look for treatable causes, as you should not just write it off as directly PD related**
Zoltan Mari	**swallowing exercises include a behavioral component, so the importance of multi-disciplinary approach needs to be emphasized**
Janusz Alex	Recomend early pharmologic treatment of orthostatic hypotension or reducing the Parkinsons or Alzheimer medication causing hypotension?
Zoltan Mari	**good question re: whether C/L helps dysphagia - the answer is that usually not, but it depends. In some cases it can**
Zoltan Mari	**it depends on how much of the dysphagia is related to the pharyngeal muscles being rigid and slow, as part of PD, which can improve with C/L**
Zoltan Mari	**atelectasis is not common, but the impairment of healthy and full respiratory movements certainly can be a factor contributing to it**
Zoltan Mari	**Reducing PD medications is rarely a sustainable strategy to address nOH, because that means compromising on treating motor symptoms**
Zoltan Mari	**as to the using pressors, that usually isn't done early, we first need to exhaust non-pharmacological options**
Zoltan Mari	**If the patient is on the "over-medicated" side, then I agree that lowering PD medications can be an option, but as PD is progressive and symptoms are likely to worsen over time, just reducing PD medications is not usually a very effective or sustainable measure/strategy to help nOH - also, the extent to which PD medications actually lower BP tend to be a bit over-rated - it is possible, but in the majority of patients their such effect is usually relatively small, compared to other factors**
Russell Chris	Are there still Medicare limitations on the amount of therapy allowed each year? If so, what are they?
Abbott Matthew	what is a typical course of OT/PT (duration, sessions/week, etc)?
Norman Schwartz	How does one address an older,. say 80 y/o PD patient who gets fatigued with modest activity and has no cardiac or pulmonary disease?
Norman Schwartz	The pt type I mentioned also has good sleep hygiene.
Zoltan Mari	**Unfortunately fatigue is one of the most common and often most difficult + highly disabling predicament PD patients suffer from**
Abbott Matthew	do OT's/PT's perform physical inspections or evaluations of the pt's home, make recommendations based upon that?
Zoltan Mari	**I would say there is no one universally successful treatment, but again a multi-disciplinary approach is often the best bet. First things first, I would make sure the patient is optimally medicated. for example if they are "under-treated" it can be a major drivere of fatigue**
Norman Schwartz	Is the etiology known?
Zoltan Mari	**I recommend considering the PKG watch in case you are unsure - that can, over a period of prolonged observation periods, demonstrate if the patient is undertreated**
Zoltan Mari	**because that is not always easy to determine in an 80-year-old, based on history and just a spot-exam in the office**
Zoltan Mari	**as to etiology, it is likely multifactorial, but certainly the dopaminergic system has an important tuning funcion in our reward mechanisms and "energy" levels**
Janusz Alex	Not all PT programs have Parkinson expertise; any guideline artices?
Corturillo Kathleen	Goals of care conversations are essential, including when considering the use of NGT/PEG tubes. Early referral to Palliative Care in any neurodegenerative disease process can help discuss GoC as well as many other aspects of symptoms management.
Norman Schwartz	Thanks again Dr. Mari. The idea of undertreatment in PD is helpful.
Papner Susan	how does you get in home OT/PT?
Norman Schwartz	In Ohio, I order it with the diagnosis thast makes pt home bound.
Zoltan Mari	**Also, look for Centers of Excellence**
Zoltan Mari	**for a referral**
Shaina Meyer	**Hello Janusz Alex, I referenced a few in my references and slides at the end that may be helpful. Here is one that gives a good general understanding to therapists: Radder, D. L., Sturkenboom, I. H., van Nimwegen, M., Keus, S. H., Bloem, B. R., & de Vries, N. M. (2017). Physical therapy and occupational therapy in Parkinson's disease. International Journal of Neuroscience, 127(10), 930-943.**

Shaina Meyer	**Additionally, I would recommend therapists that are interested in working with people living with PD attend the Parkinson Wellness Recovery PWR! course and volunteer at Rock Steady Boxing**
Shaina Meyer	**Thank you Kathleen Corturillo, agreed!**
Shaina Meyer	**Susan Papner, in home OT/PT is accomplished through referring to a home health service. However, keeping in mind that to qualify for home health, the person should be considered to be "home bound". If the person is receiving home health services, they cannot receive outpatient services at the same time.**
Katz Susan	Why is eating a low fat diet helpful in gastroparesis?
Safai-Nili Firouzeh	Should we use probiotics for SIBO
Janusz Alex	To what extent of treatment beyond diet will you use before referring to GI specialist?
Safai-Nili Firouzeh	Can you recommend any specific probiotic that can be helpful for SIBO
John Lanzillotta	Ia there a particular probiotic Dr. Oguh recomends? thnaks you!
Abbott Matthew	effectiveness of antidepressants for pain? which ones specifically?
Norman Schwartz	Dr. Farbman, please briefly review facial and other non verbal expressions of pain? I know most but may learn something.
Abbott Matthew	is there any correlation with the release of substance-P with these conditions, or is increased pain due to sensitivity of pain receptors?
Kaufman Charles	Is there any place for THC in pain management of PD?
Zoltan Mari	**Best probiotics for SIBO Although it may be seen as contradictory to use probiotics in small intestinal bacterial overgrowth, one particular probiotic yeast, Saccharomyces boulardii, has been identified as beneficial. As a yeast, Saccharomyces boulardii can be taken alongside antibiotics and its functioning is unaffected. It has known anti-inflammatory effects in the gut9 and can inactivate pathogenic toxins10 and stimulate enterocyte (cells of the intestinal lining) maturation11. In a pilot clinical study of 40 patients diagnosed with SIBO due to the autoimmune condition, systemic sclerosis, the effects of Saccharomyces boulardii on hydrogen production and SIBO eradication was assessed and compared with metronidazole, a common antibiotic used in the treatment of SIBO12. The patients were divided into 3 groups; one group were given metronidazole alone for 1 week, another group were given metronidazole with Saccharomyces boulardii for 1 week and the third group were given Saccharomyces boulardii alone for 1 week. Two months later, hydrogen breath tests were repeated. The group that achieved the best results was the metronidazole and Saccharomyces boulardii group, with SIBO eradicated in 55% of participants at 2 months. Saccharomyces boulardii therapy alone eradicated 33% which was better than the group given metronidazole alone (with just 25% SIBO eradication). Of note, the Saccharomyces boulardii group had the lowest level of adverse effects from treatment, and taking SB alongside metronidazole appeared to reduce the risk of antibiotic side-effects from 53% to 36%12. The results of this clinical study suggest Saccharomyces boulardii as a potential beneficial adjunct to antibiotic therapy when treating SIBO.**
Burke Deborah	what about Lyrica for neuropathic pain?
Zoltan Mari	**Lyrica is approved and used commonly for neuropathic pain**
Corturillo Kathleen	What are the best pain assessment tools to use for patients with cognitive dysfunction, particularly dementia?
Zoltan Mari	**Since history directly from demented patients could be less reliable, we often rely on heteroamnesis**
Zoltan Mari	**https://www.verywellhealth.com/pain-scales-assessment-tools-4020329**
Zoltan Mari	**for pain scales**
Manzoor Bhatti	how reliable are pain scales as described by a patients, don't they exaggerate?
Zoltan Mari	**they may exaggerate, distort, or under-report - depending on their premorbid personality**
Zoltan Mari	**that's why we can't rely on their self-report entirely and asking care partners to document pain reports in real time in a log book**
Manzoor Bhatti	you ask a pt to descrive his pain on a scale of 10, answer will be 10 even if pt is sitting without any distress
Nelson William	How do you decide if periodic leg movements of sleep cause hypersomnia, and are older (> 65) patients with significant PLMS at increased risk of neuronegenrative disorders ? If so, which ? S ,

Nelson William	Hypersomnia defined as including sleep attacks.
LINDSEY SUSAN	Any recommendations for short term sleep problems (such as when on a steroid) in patients with cognitive issues.
Corturillo Kathleen	Which medications are recommended for hypersomnolence?
Odinachi Oguh	**TO what extent of treatment byeond diet will you use before referral to GI specialist?**
ROBINSON JOAN	Does Melatonin have a role in these sleep disorders?
Odinachi Oguh	**Answering questio; to what extent of treatment will you use before referral to GI. Based on experience . I would start with dietary modifications and managment of constipation with a bowel regimen as mention in my lecture. I would use medications such as amitiza or Linzess or cirtucell where appropriate. Of course with gastroparesis patients will need to e seen by GI early.But all in all working hand in hand with a GI specialist should be considered early .**
Newcomb Rob	An earlier presentation noted that OTC melatonin doses are often superphysiologic, and can cause long term sleep problems. Can you speak to that?
Odinachi Oguh	**PLMS can caused hypersomna if it affects the quality of sleep , this can be teased out by history or useof PSG diagnostic measure. If quality of sleep is impacted it will lead to hypersomnia**
Odinachi Oguh	**RLS , PLMS does not increase the risk of neurodegenerative disease but her comorbid conditions seen in many neurodegenerative diseases.**
Odinachi Oguh	**Hypersomnia is often differentiate from Sleep attacks though sometimes grouped together. History , good medication history can be helpful in differentitating these to conditions . We do know that Dopamine medications and may psychotrophics can cause sleep attacks.**
Odinachi Oguh	**In short term sleep problems like due to steriods or antibiotics , usually wait till the culprit is eliminated , I do not usually recommend treating a medication side effect with another medication.**
Odinachi Oguh	**Medications for hypersomnolence : this is tricky but the first steps is to exclude primary sleep disorders which is treatable OSA or central sleep apnea which can be treated with CPAP or BIPAP, eliminate any medication culprits where possible. If this is deemed 2/2 to the Neurodegenerative disease then we may recommended uses of stimulants such as Nuvigil , provigil , ritalin, adderall but again it has to be the appropriate patient as there is no DATA that this medications work in ND patients.**
Odinachi Oguh	**I also use scheduled caffiene in the morning for some of my patients with significant hypersolmnolence**
Carriere Lucille	**Behavioral strategies (e.g., strategic, timed napping) will also be helpful to consider in managing hypersomnolence disorders and improving daytime functioning**
Odinachi Oguh	**Melatonin we use a lot due to the circadian disruption that happen in may ND diseases , but the keep is that circardian control through out the day is important fot it to function approprtiately light exposure during the day and using Melatonin 1 hr prior to bedtime. As for the superphysiologic effect of melatonin may be more related to high does of melatonin use in certain patients may lead to paradoxical effects on sleep . Some studies show that does above 10 mg may ave this effect. Though i have used higher does in patients with rem behavioral disorders i typically recommend you start small and go slow if you are initiating melatonin in certain patients . If there is not a clear circadian disruption for example people with chronic insomnia Melatonin will do nothing for these patients.**
LINDSEY SUSAN	please speak to hypnagogic hallucinations
Burke Deborah	How does psychosis appear in Parkinson's Disease Dementia (late in disease as opposed to LBD). More similar to Alzheimer's then LBD?
Ghazi Saidi Ladan	Are individuals with schezophrenia at higher risk of developing dementia?
Dylan Wint	**Lindsey Susan--please be more specific. You're not asking me to speak to your hallucinations are you? :)**
Dylan Wint	**Burke Deborah--psychosis in Parkinson disease (you will hear in a minute) is essentially identical to Lewy body psychosis because it's essentially the same disease**
Dylan Wint	**Ghazi Saidi Ladan--people with schizophrenia have a higher risk of developing dementia in the formal sense--cognitive decline that interferes with activities of daily living. This is why schizophrenia used to be called dementia praecox (dementia of the young, or premature dementia)**
Dylan Wint	**However, there is not a clear connection between schizophrenia and the common degenerative dementias like Alzheimer disease, Lewy body disease, cerebrovascular disease**
Khazan Tanya	Is the quality of delusional thinking and timing of its onset significantly different in patients with vascular dementia? Or does the presence of combined eitologies make this possible to distinguish?
Dylan Wint	**Depends on the subtype of vascular dementia. Large vessel disease in occipital, parietal, and [sometimes] temporal regions can cause visual hallucinations without auditory (except sometimes in temporal) or delusional correlates**

Dylan Wint	**Small vessel cerebrovascular disease is a bit of a crapshoot. I am not aware of any characteristic features of psychosis in these individuals.**
Dylan Wint	**If I see someone with small vessel disease who later develops well-formed recurrent visual hallucinations, I think and check for Lewy body disease, which is often comorbid**
Abbott Matthew	is there an increased incidence of psychosis in AD, PD, or LBD with PMHx of multiple mTBI earlier in their life?
LINDSEY SUSAN	Not my hallucinations! Pt. has MS with increasing hypnagogic hallucinations (all senses except , few inappropriate affects,
Dylan Wint	**Abbott Matthew--no increased incidence with earlier TBI that I know of. However, I would not be surprised if this were found to be the case. The more damage done, the more likely the symptoms**
Lyon Abigail	in the possibly rare case that an older adult with MCI or mild dementia is taking Ritalin or a similar stimulant, could this class of medication cause psychosis in dementia?
Burke Deborah	can you give specific citation or name of aripiprazole study?
Nelson William	Is there a syndrome that ties the two Dx together ?
Dylan Wint	**Lindsey Susan--hypnagogic hallucinations can be normal phenomena. If your MS patient has retained insight, especially if s/he has brainstem disease, this may simply be a result of dysregulated brainstem sleep centers**
Dylan Wint	**Burke Deborah--I believe Fernandez HH was the first author on the aripiprazole in the first PD psychosis study that I'm aware of**
LINDSEY SUSAN	Sorry, I was still typing when my computer froze; no known brainstem but significant frontal lobe lesions and executive function deficits
Walter Kozachuk	How significant is the hyperglycemia in patients with both diabetes and DAT??
Gorkin Robert	Q for Dr' Ritter and Wint (or anyone else): What are your thoughts about "terminal (or paradoxical) " lucidity
Burke Deborah	so the likelyhood of halluncinations is the same in both Parkinson's dementia as LBD?
Gorkin Robert	reports that people with dementia suddenly clear up soon before death--see Michael Nahn's ane George Mashour, et al
Janusz Alex	Recommendation for environment modication to keep dementia psychosis patients at home.
Gorkin Robert	Alzheimer's and Dementia August 2019 pp 1107-1114. vol 15 issue 8
Papner Susan	Do you have any tips on caregiver response to visual psychois events to comfort the patient
Denise Pardee	Does validation of delusions or hallucinations provide any clinical benefits?
Aaron Ritter	**Validation can reduce immediate anxiety and stress/distress. Gentle redirection can be effective "these are probably your mind playing tricks on you"**
Aaron Ritter	**direct confrontation about delusions (never) works**
Aaron Ritter	**hallucinations theres usually a bit more to work with**
Aaron Ritter	**in terms of insight**
Abbott Matthew	is a pharmacogenomic approach to therapeutic management of sx play a role in AD, PD, or MS?
Aaron Ritter	**not yet. I think the help is poor responders. however, there is limited data around pharmacogenomics and response to medical therapies in idiopathic psych dieases and no research evidence in dementia**
Denise Pardee	Might there be resources for communication techniques for caregivers in acute care providing carebedside
Denise Pardee	that might also translate well to caregiver education for family members
Manzoor Bhatti	how to manage a nursing home pt w dementia with behaviour disorder, wandering, and unsafe actions?
Lee Hing-Chung	Which medication do you recommend for sleep disoder in neurodegenation patients with anxiety/depression?
Aaron Ritter	**usually start with either trazodone or mirtazapine**

Aaron Ritter	**usually small dose can help 25-50 trazodone or 7.5 mg mirtazapine**
Lyon Abigail	what neurodegenerative disorders are most likely to have mania at onset?
Aaron Ritter	**Nursing home patient with dementia-start with ruling out UTI, optimizing cognitive medications (donepezil, memantine), then start with escitalopram (or other ssri) using benzos PRN. Modification of environment and training staff. usually an environmental trigger can be identified**
Aaron Ritter	**hypomania cluster occurs in about 5-10% of alzheimer's patients.**
Aaron Ritter	**lewy body patients may have hypomania with urinary tract infections**
Aaron Ritter	**so hypomania presenting probably alzheimer's disease**
Norman Schwartz	A woman whose mother had alzheimers wrote a book called "The 36-Hour Day." Family members of some of my patients found it helpful.
Aaron Ritter	**That's the caregiver's bible**
Wise Patricia	what about buspar for anxiety symptoms in AD
Aaron Ritter	**The 36 Hr Day is recommended for everyone who cares for patient with dementia**
Aaron Ritter	**yes, buspar is a good option. limited research but i see benefit in some people with milder anxiety. needs to reach TID dosing before we can see benefit**
Wise Patricia	great info, thank you!
Lyon Abigail	can ECT worsen dementia and is it more likely to worsen functioning or cognition in some types over othere
Norman Schwartz	Yes, years ago I heard the author interviewed. Her mother kept calling her I believe in the middle of the night claiming she could not find her key. Author and sister purchased several un made keys and placed them in her drawer. She would tell mother: "It's in your drawer."
Aaron Ritter	**ECT can worsen cognition as a side effect. Has a place for severe and refractory of depression in dementia but careful use. May help people with parkinson's disease as well.**
Anand Akhil	Any medication recommends to treat bipolar presentations for patients with NDD?
Abbott Matthew	TMS has shown effectiveness for PTSD in the VA, is it used for psychiatric sx in these conditions as well?
Aaron Ritter	**Bipolar presentations are tough in NDD> I personally use depakote with low dose benzos prn. trileptal has resarch data but not well tolerated**
Aaron Ritter	**quetiapine is probably the safest for NDD because of monitoring requirements with depakote and side effects of sedation including pretty bad tremor. but i find it to work the best**
Aaron Ritter	**i have had some luck with extended release quetiapine but these are milder cases. usually stop at 200 mg and then titrate down or off after acute episodes**
Aaron Ritter	**tms has emerging evidence. i think its a great option for depression in NDD. some evidence it might help cognition.**
Norman Schwartz	What does TMS stand for?
Abbott Matthew	transcranial magnetic stimulation
Tabbaa Mutaz	Biogen monoclonal antibody just approved , expert panel all voted no would you use it ?
Walter Kozachuk	Can you comment on the basic neuroscience studies showing that glutamate increases amyloid toxicity? Does this suggest that future anti-glutamate therapies may have efficacy?
Tabbaa Mutaz	does medicare pay for csf diagnstic ?
Corturillo Kathleen	I'm interested in the panel thoughts on Aduhelm.
Dylan Wint	**The approval of aducanumab was based on politics and economics. The science of Alzheimer disease and the science of the studies presented to the FDA do not support its approval except provisionally in individuals with amyloid positivity and (at worst) very mild symptoms**

Zoltan Mari	**First of all, I do not know how I would have decided - it is just extremely difficult. Difficult to balance the risks and dangers of "false hope" and the risks and downside to deny the chance of a treatment that "could" work. I would think the evidence is weak and unconvincing, explaining the decision of the advisory board, multiple of which quit since (in protest of the FDA decision). On the other hand, a very similar situation 15 years ago with PD (the ADAGIO trial/rasagiline - inconclusive results - neither confirmed nor excluded of disease modifying benefits) and the FDA's negative decision has been discussed, challenged, we still don't know if that was a good or bad decision. I think think overall it is probably a good thing more than it is a bad thing.**
Dylan Wint	**I'm not sure how often the FDA overrides a unanimous opinion of the advisory council (well, not exactly unanimous--one advisor said there wasn't enough information)**
Wise Patricia	What about Donepezil and Mematadine for MCI - MOCA score 17-20
Norman Schwartz	That is what I thought. Early issues.
Dylan Wint	**A MoCA of 17 seems low for MCI. Are you sure it's MCI?**
Dylan Wint	**The cholinesterase inhibitors (e.g., donepezil) and memantine are approved only for dementia, not for MCI. There is no evidence of efficacy for either of these in MCI**
Wise Patricia	Thank you - pt is functional in her life, English as second language, seems normal but had low score.
Wise Patricia	DW - I learned that from you in past conferences, so have not been prescribing but wanted to confirm. Want to do something besides discuss lifestyle changes!
Dylan Wint	**Ah, yes, subtle language atypicalities can reduce MoCA performance**
Manzoor Bhatti	is there a treatment for cerebral amyloidopathy.
Janusz Alex	If you were to Rx aducanumab, would you exclude all else first
Dylan Wint	**M Bhatti--do you mean cerebral amyloid angiopathy?**
Dylan Wint	**If you mean CAA, no, there is no specific treatment. Avoid anticoagulants and antiplatelet agents unless necessary to treat something else**
Dylan Wint	**I might prescribe aducanumab in someone who is amyloid positive (PET or CSF) and no worse than mild dementia. Those are the study participants who benefited. Like with other disease modifying treatments, you want to be sure that the target (amyloid) is very likely to be responsible for or exacerbating the symptoms**
Manzoor Bhatti	no, monoclonal antibodies treatment against amyloid plaques in brain and for prevention of ad
Wise Patricia	Recent news stories re NO ETOH is "safe for brain." Is there anything new? Are we advising no ETOH for all? #heartbreaking
Zoltan Mari	**Not good for the brain. Yet, EtOH can relax hypertonic muscles.**
Wise Patricia	And maybe good for heart. For patients with MCI and beyond, advice is Zero ETOH?
Zoltan Mari	I want to warn you that unfortunately I did not have time to go through the management part of my slides, but they are being made available fully later.
LINDSEY SUSAN	Dr. Mari..weakness related to spasticity: of the spastic muscle or antagonist?
Zoltan Mari	**weakness in the patient's inability to exert meaningful voluntary force - while the spastic muscles are very high tone and muscles are often hypertrophic, in dynamometer testing the patient will not exert full/normal strength**
Tabbaa Mutaz	How long you keep using botox for a child with cerebral palsy when he becomes adult and later
Zoltan Mari	**The question of ongoing BoNT injections is determined by the persistence of spasticity, its severity, and the ongoing benefits**
Sara Langer	In patients with early dementia with Lewy bodies who are not overtly Parkinsonian, proprioception, balance, mild rigidity and bradykinesia can improve with cholinesterase inhibitors alone. Why aren't patients with early Parkinson's disease started on low dose cholinesterase inhibitors as dopa-sparing agents?
Fredman Steve	ZOLTAN DESERVES EXTRA CREDIT FOR BEING COMPLETE
Abbott Matthew	Great course, thank you!
Abbott Matthew	Great course, very informative, thank you!
Calabrese Beverly	Wonderful day of education! Thank you. Beverly Calabrese

Norman Schwartz	Thank you Dr. Mari.
Wise Patricia	You guys at Lou Ruvo always inspire me. Thank you for this conference!
Crabb Yangcha	Thanks for the wonderful conference!
Randall Yvonne	Great sessions! Thank you!
Janusz Alex	Thank you!
Emily Bain	thank you
Villamil-Jarauta Jose R	Thank you
Johnson Sonja	Thank you.