Myocarditis: An Immune Related AE of Checkpoint Inhibitors

December 15th Workshop – Peapack, NJ

Hosted by ***Project Data Sphere, LLC***, an independent, non-profit initiative of the ***CEO Roundtable on Cancer's*** *Life Sciences Consortium*

AGENDA

Time Slot	Topic	Lead	Topic description
7:30am-8:00am	**Breakfast**		
8:00am-10:15am	**Session I: Myocarditis associated with Checkpoint Inhibitors: Pathophysiological and clinical review** **Chair: John Davis, Head of Clinical Development, Pfizer** ***Goals of Session:*** • ***Establish a baseline understanding of what we know, including the science and clinical realities of myocarditis as an immune related AE***		
8:00am-8:30am	Welcome & Opening	Patrick Caubel, Head of Worldwide Safety, Pfizer	Welcome
		Mace Rothenberg, SVP Chief Development Officer, Oncology, Pfizer	Overview: Why we are holding this workshop: Complex benefit/risk for this class of drugs; we need better understanding through: • Development of case definition(s): Identify which definitions are needed and put groups in place to develop • Conducting studies - Pool patient-level de-identified Checkpoint Inhibitor data within the *Project Data Sphere* platform - Perform retrospective analysis of new data - Consider developing a Patient registry • End goal: Inform patients and prescribers
8:30am-9:00am	Pathophysiology of Myocarditis	JoAnn Lindenfeld, Vanderbilt University	• Definition and description of the science of myocarditis

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9:00am-9:45am	Myocarditis associated with checkpoint inhibitors - clinical overview	Ryan J. Sullivan, Hematology/Oncology MGH Cancer Center	• Oncology perspective: How treatment regimens are chosen
		Tomas G. Neilan, Director, Cardio-Oncology Program MGH	• How the science manifests in the field; how myocarditis as an immune related AE is different from traditional myocarditis • PD1 and PDL1 perspective -- Drugs no longer used in combination with other therapies so the nature of toxicity has changed - How are they being used now? - What are the new therapies? - In what other context is immunotherapy being used in combination with other therapies? • Impact of previous treatment on toxicity and across different malignancies
9:45am-10:30am	Myocarditis associated with checkpoint inhibitor - review of safety observations	Richard M. Steingart, Chief, Cardiology Service Memorial Sloan Kettering Cancer Center	• Review of safety observations seen; complexity of differential diagnosis • Interactive Discussion
10:30am-10:45am	**Break**		
10:45am-1:00pm	**Session II: Myocarditis associated with Checkpoint Inhibitors: Regulatory Perspective** **Chair: Roland Chen, Vice President / Head, Global Pharmacovigilance and Epidemiology, Bristol Meyers Squibb** ***Goals of Session:*** • ***Understanding of what we know and how to prioritize efforts accordingly*** • ***General directions and guidance on path forward*** • ***Understanding of actions (e.g., pharma, academia, etc.) that can be taken to address questions and identify gaps***		
10:45am-11:30am	Regulator Perspective	FDA: Laleh Amiri Kordestani, Cardio-oncology Liaison, OHOP (formerly CDER), FDA	• What we know: FDA observations on myocarditis (e.g., incidence, severity, impact of interventions) across therapies • Insights and questions coming out of 1Dec2017 workshop • General directions on how FDA might want to move forward (including guidance to industry) • Implications of immune related AEs for patients, developers and public policy
11:30am-1:00pm	Roundtable	Group Discussion	Open discussion of questions, concerns, ideas including: • What we don't know: What are the gaps that we need to address (e.g. means to stratify patients by risk prior to checkpoint? inhibitor initiation) • How do we prioritize these gaps? • How do we contextualize the risk of myocarditis in the context of the benefits these therapies offer? / Are there previous development analogs from which we can draw learnings? • How can we develop rational interventions / screening approaches to maximize patient benefit, minimize risk, and optimize (appropriate) use of checkpoint inhibitors?
1:00pm-1:45pm	**Lunch**		

Time Slot	Topic	Lead	Topic description
1:45pm-5:00pm	**Session III: The Checkpoint Inhibitor Working Group: Next Steps for Myocarditis and Beyond** **Chair: Mayur Patel, Vice President, Global Patient Safety (Oncology Therapy Area), AZ/MedImmune** ***Goals of Session:*** • ***Align on a path forward***		
1:45pm-2:00pm	How we can develop a case definition	Bill Gregory, Senior Director, Pfizer	• Explain the standard case definition template and why it is needed • Propose a process for executing a standard case definition. This needs to be linked to how data will be collected
2:00pm-2:45pm	Potential prevention and early detection	Tarek Hammad, Head of Signal Detection and Benefit Risk Assessment Global Patient Safety Innovation, EMD Serono	• Methodological consideration to observe when identifying predictors/markers that can help in the prevention or early diagnosis of myocarditis
2:45pm-3:30pm	Treatment algorithm	Javid Moslehi, Director, Cardio-Oncology Program, Assistant Professor of Medicine, Vanderbilt University	• Early data suggests this is a rare event; we can discuss treatment but there are many questions; how do we study rare event for a drug class that is taking over oncology? • The need for a better protocol for early detection and treatment/interventions • The need for guidance to collect data effectively; definitions for myocarditis as irAE – what should be captured so we can more effectively run algorithms?
3:30pm-3:45pm	Confirm Definition	Bill Gregory, Senior Director, Pfizer	• Group Discussion
3:45pm-4:15pm	What is our research agenda?	Martin Murphy, CEO, *Project Data Sphere*, LLC	• Develop the research agenda and alignment: What other irAEs should be prioritized? How can we best leverage *Project Data Sphere*, LLC? • Discussion of the data we have vs. what we need
4:15pm-5:00pm	Wrap up/Next Steps	FDA & CFDA Peter Honig, SVP Worldwide Regulatory & Safety, Pfizer Freda Lewis-Hall, Chief Medical Officer, Pfizer	Final words/asks from regulators Facilitated discussion of next steps: 1. Develop publication plan: Finalize and publish a case definition and intake questionnaire [needs to be based on *new data*] 2. Develop communication plan: develop a report/synopsis of outputs of the workshop; anticipate future touchpoints: identify what communications should be shared with which constituents through which communication channels 3. Create a registry (retrospective and prospective), under the auspice of Project Data Sphere, LLC 4. What are the next AEs to approach and does everyone agree it makes sense to proceed to these? (e.g. pancreatitis, encephalitis) Closing