Project	What's the product?	What's the problem?	Comments / questions to the team
PAT-U-PAMI	Painless micro-needle injection for asthma treatment for infants	Current drug delivery methods are painful and may cause fever.	
PAT-U-PAMI	A microneedle patch of omalizumab for treatment of pediatric asthma	Current treatment with omalizumab requires injection which is not optimal for kids, is painful and needs several doses	What is your FTO considering the patent of omalizumab? Are you selling the device that can then be used by omalizumab or any other treatment or the entire product?
PAT-U-PAMI			Need to address IP: do you have Freedom to Operate? Microneedle space seems to be very active/well-explored. Would be good to position omalizumab as an entry point and talk about expansion potential to other diseases/drugs. Is there a company that you could partner with that needs a safer/easier delivery to do PoC? What is your volume limitation? Would be great to see a prototype. Schematic of how it works on the skin and delivers the drug would be a helpful visual.
PAT-U-PAMI	Microneedle device to deliver Omalizumab to asthma patients	Usually this drug is administered with a hypodermic needle causing fear in children. Microneedle device can deliver drug with minimal pain	How often would micro needles need to be applied? How long do micro needles remain functional to deliver the drug? Is there a risk of infection?
PAT-U-PAMI	Microneedle patch for pediatric asthma treatment	The current medication is delivered with a standard needle mulltiple times per month leading to phobia and errors	Would it better if the the medication is injected slowly into the body? Is the technology the microneedle delivery or impregnating of the drug into he microneedle structure?
PAT-U-PAMI	microneedle for the administration of asthma drugs in pediatric patients suffering from asthma	Current treatments for children suffering from asthma are painful, difficult to administer and hard to know the dose injected because are using standard needles.	 Why are you using this drug as an example? Is the only one used to treat asthma in children? Can you explain more about the mechanism of action of asthma drugs? Can they be absorbed just by superficial injection as microneedles?

			- Is asthma the best clinical application for your needles?
			- Did you develop first the needle or identified the need?
PAT-U-PAMI	Pediatric asthma	Difficult to administer administer asthma	What is the scope of the problem: Any metrics?
	treatment using painless	meds to peds	
	micro-needle		What is the size of the market?
			Are there any other applicable drug delivery mechanisms
			that can utilize the micro-needle.
			What are your competitors?
PAT-U-PAMI	New asthma device	Dosage error in current injection treatment	What would be the recommended time to wear this device?
	treatment: Microneedle	of omalizumab	What would be the skin reaction produced?
	patches of omalizumab		When would be the best moment to start this treatment?
			What about the possibility to remove this device by the child?
			what about the inflammatory response?
PAT-U-PAMI	a patch to deliver	delivering asthma treatment for children	I might have missed this information: In which state of
	medication through skin	(currently invasive and painful)	development is the patch? How long would it take from
			"lask 1" to "lask 3"?
PAT-U-PAMI	a patch device for administration of	The present way to administrate Omalizumab is bu hypodermic injection	PI status. How better is this device? (clinical results)
	Omalizumad to childrens	that causes pain and other side effects.	
	with chronic asthma.		
PAT-U-PAMI	painless injection device	Asthma inhalers doe not work for infants	What do physicians do now with such infants and why does
	for infants	as they are not able to do controlled	it not work?
		inhalation	Need to motivate the need much better than they do now.
			I can think about many diseases where a microneedle may
			be a great improvement to current therapy. Team needs to
			think about this.

PAT-U-PAMI	microneedle patches	the pain of injection in asthma patient	
PAT-U-PAMI	needle to deliver product to children with asthma	pediatric cancer	not clear what the value proposition is - how will it compete?
PAT-U-PAMI	micro needle patches of omalizumab, to treat paediatric asthma	The current treatments are injections of omalizumab, causing needle phobia, are accompanied by human error, or dosage errors etc. The proposal, patches, are painless, improve the immune response, have minimal risks of bleeding and potential infections and reduce the drug dose and potential human error.	Is it just an idea or a potential alternative of the current methodology? Is any of the proposed tasks already assesed? It was not clear from the presentation whether or not is under development already.
PAT-U-PAMI	Micro needle delivery system for asthma drugs	Infants with specific types of asthma need lots of shots over time and it's painful and inhalation methods are hard to follow and make sure kids are getting the right dose.	Do you have IP around this? What's the novel piece? Have these technologies been used with this or other drug delivery or are you also inventing new materials? Could this also be applied to other disease areas (if this is a new delivery mechanism). Are there potential issues with immunogenicity rejection etc if these are actually implanted (if this was supposed to stay in the patient or not wasn't totally clear to me).
PAT-U-PAMI	micro-needle method to treat pedriatic asthma	Currently the effective treatments are injectable which is specifically challenging for treating young children	
PAT-U-PAMI	Pediatric asthma treatment using a painless microneedle patch for administration of Xolair	Xolair is a good drug, but use not optimized because administration is 1-2 injections every 2-4 weeks	What is competitive landscape? What is current status of development? Has feasibility work been done? What are next steps, timelines? How difficult is this to manufacture? What are costs?
PAT-U-PAMI	Micro needle injection of pediatric asthma medications	Getting children to inhale is difficult and hypodermic needles are painful and associated with fever	What aspect of this did you invent? Have you considered NICU applications?

PAT-U-PAMI	micro needles patch to deliver drug or vaccinations for newborns	difficulty in administering injection based medications for newborns	 what will be the cost of this micro needles patch, since newborns get so many injections, is it cost effective to use this technology traditional injection is intramuscular, with the micro needles are you deep enough or is it going to be in skin or subcutaneous tissue? why specifically omalizumab?
PAT-U-PAMI	a needless device to insert medication to pediatric population	current method is a needle, creating fear	does this medication take longer to take effect?
PAT-U-PAMI	Microneedles por asthma treatment.	Needle-phobia, human error, infection, dosage error.	Which material are these microneedles made of? Are they biocompatible in case of break? Are they reusable?
PAT-U-PAMI	A painless microneedle that allows increased immune response to a vaccine against asthma in Children	Needle fear, infections, mistaken dosages due to normal use of needles.	Is it really painless or less painful? Can the increased immune response induce more inflammation around the injection site?
PAT-U-PAMI	a microneedle patch	Needle injections for pediatric asthma	 can this be done at the home, if so, are there additional complexities to consider what data do you have that indicates you have improved immune response via this administration method where are you currently in the process
PAT-U-PAMI	Microneedle patches of Omalizumab?	Asthma in kids: 11% of children in the world The treatment: injections	Presentation needs to be improved and a more detailed information about your products should be provided
PAT-U-PAMI	Microneedle patch for delivery of anti-asthma treatments for children	Current asthma treatments are difficult to deliver (injected or inhaled) and difficult to monitor	What is the precedent for these microneedle patches? What is the potential market, and do you have a PoC study in animals or explant models for successful delivery? Does cutaneous delivery lead to actual activity for this kind of drug?

PAT-U-PAMI	micro needle for administering omalizumab to kids	pediatric asthma	How long does the child wear the patch? All the time? Or is putting on the patch for 1 hour or 1 day enough? If it needs to be left on for a long time, how do you ensure that it doesn't come off accidentally?
PAT-U-PAMI	Painless micro needle for asthma	The periodic injection	
PAT-U-PAMI	Micro needle	Current needle technology and drug delivery via needles is painful	What kinds of testing have you performed to prove your assumption that this will be painless? What are the potential problems with this delivery modification?
PAT-U-PAMI	microneedle delivery of omalizumab	delivery of asthma treatments is inconvenient	Why restrict your market to omalizumab? Are there are other indications where a microneedle may be useful?
PAT-U-PAMI	Micro-needles for injection of drugs into pediatric asthma patients	Current solutions for drug injections in pediatric asthma involves hypodermic needles that have issues.	Unclear if the micro-needles will successfully mitigate all of the limitations of hypodermic needles. What is the outcome of the hypodermic needle injections for the patient? For example, is it just that the baby will cry? Or are outcomes bad because of unsuccessful needle injections? I bet babies will cry no matter what you're doing to them in a doctors office
PAT-U-PAMI	microneedle patch for omalizumab drug for pedi asthma	kids don't like needles? Is this really a problem? It's a negative of the current solution, but not a fundamental flaw. Issues of wrong dosage and human error are the same thing and can be addressed without tech	 Nice first slide - sets up the problem and solution is the microneedle solution only applicable to omalizumab? what is the business model? what is the product? This seems like an academic project does it have commercial potential?