CONFERENCE CALL PARTICIPANTS

David Risinger
Mikael Dolsten

PRESENTATION

David Risinger

Okay, well, it’s my pleasure to introduce the final session today. And, I am looking forward to Mikael Dolsten’s presentation. 15 or so.

So it is my pleasure to welcome Mikael Dolsten who is President of Worldwide R&D at Pfizer. He joined Pfizer from Wyeth where he was President of Research.

Prior to Wyeth, Mikael led Boehringer Ingelheim’s drug discovery efforts which as many of you know has punched above its weight in terms of productivity. And in between BI and Wyeth, he briefly worked at the New York Healthcare Investment Fund, OrbiMed. So I’m looking forward to him bringing more financial discipline to Pfizer’s investment spending, both internally and externally. And so with that, let me turn it over to you, Michael.

Mikael Dolsten

Thank you very much for the kind introduction. It’s a pleasure to be here today and speak to you and share with you my excitement on some of the advances we’re making in the renewed Pfizer worldwide R&D.

And I feel very proud to be leading this organization and all the scientists and the pipeline that we are building and I look forward to give you a couple examples of where we are with our strategy and vision and path forward. So let me just before we start the presentation look at the second slide here which contains the cautionary language and as always, it relates to forward-looking statements. Please read the slide and for this slide and the rest of my presentation, it’s available at our webpage that is mentioned here.

So, Pfizer worldwide R&D came together bringing some real experience the different organization under one new vibrant culture and that contains very strong small molecule oriented PGRD and the initial attempt by Pfizer to build a biotech division by acquiring some very accomplished biotech groups in California and after the acquisition of Wyeth, enabled Pfizer to bring together additional very strong expertise in both vaccines and biotech products and enabled us also to establish a very strong network of sites across the globe with our major presence in the East Coast corridor, California and also in Europe.

And what we are building is really a coherent organization that at the same time allow a diversity of approaches to be successful beyond the historical track record. And we spoke in the introduction about bringing the financial rigor into the way we operate R&D.

And what we have tried in bringing all the different colleagues together, it’s really to emphasize that science is about innovation and creativity but you need to be really rigorous at the inflection points to look at the data and translating that data into business opportunities and prioritize boldly and at the same time, resourcefully when you build the pipeline and move things forward. So it’s this blend of managing business of innovation that we think is really a part of the success for going forward.

If you look on the next slide, a revitalized R&D organization, you can see some of that flavor in the words that we have put down here. At the same time, where we’re focusing on delivering the pipeline of today, emphasizing scientific and medic difference in the drug candidates with commercial relevance and effectiveness.
At this very same time, we need to prepare for the next generation of therapeutics. And I will share with you some exciting drug design capabilities we have and also explore new ways of employing precision medicine to outperform standard of care and generic drug available when it comes to the right drug for the right patients.

And of course in R&D to be successful, the structured organization is a foundation but it’s really about the talent you bring in and the type of culture that balance between the rigor in the financial mindset and at the same time, stimulate people to excel beyond their perceived potential. If we move to the next page, you can see the R&D leadership team that we’ve put together and I’m really proud to see such a blend of different experiences but at the same time carried forward by highly professional and accomplished individuals. You can also see the mix from the legacies, Pfizer’s small molecule world, the biotech California groups and the Wyeth and put together in a real nice mosaic of acquisition integration.

On top of that, we clearly recognize that we will always need to bring in new mindsets and stir up the pot of ideas. So over the last year or so, we have added some truly talented and great colleagues.

You can see Jose Carlos Gutierrez-Ramos leading our big biotech R&D group, in particular localized in the Cambridge area. And recently, very senior people like John Hubbard are joining us to head up our development operation.

He brings in more than 20 years experience in running great CRO organizations and how you create a lean and efficient development machine. At the bottom, you can see some of the new Chief Scientific Officers, each of them very accomplished, and let me just underline one of them, Mike Ehlers, who decided to leave a star career at Duke University as a Howard Hughes investigator and an (inaudible) professor to join Pfizer.

And many people said, why would you make that move? But I think Mike knew the initial relationship when we started to get to know each other really felt that what we are building is unique and it’s a one time in your life opportunity to translate great science into something that’s (inaudible) for patients and can be successful drugs on the market. And Mike was actually interviewed in the Journal of Nature recently if you want to learn more about his deliberations when deciding to join our R&D group.

If you turn to the next page and we just have a few words about how do you manage science and business in an integrated way. And on one hand, we would like in our laboratories to have the best scientists but also with a great business insight.

So very early on, we discussed what are the true commercial needs. What does the next generation of product need to deliver in order to be attractive for payers.

And this general framework guides where we put our scientific priorities. And the closer we come to clinical testing and the designing of Phase 2 proof-of-concept studies, the more specific and detailed are we at each asset level.

And you can see some of those mentioned here. It’s not only about scientific rigor, although that’s the backbone. It’s also about understanding what is truly a clinical differentiated drug and what is a me-too drug that we should move away from.

How do we translate differentiated drugs to a label that can be endorsed and approved by regulators and translate into a good product message on the market that can allow this drug to be successfully commercialized and provide medical benefit? So it’s clearly a way to bring business and science together under one roof.

If we move to the next slide, you can see how we are trying to prepare our paths forward over the next handful of years, meeting the challenges that we face as an industry. The first horizon starting from today is about delivering the portfolio and emphasizing what I introduced here, clear clinical and medical differentiation and moving from target criteria to statistical probabilities when you set your prospective targets for your proof-of-concept studies.
At the same time preparing for the next generation therapeutics, we invested heavily in drugs that had completely unique properties that we believe haven't prior been pushed into clinical studies and I will share a couple of those examples with you. Also we would like to widen our mindset.

The majority of drugs you see in the pipeline of this industry have been assigned to the customer needs in the developed world. And for example in our vaccine franchise, we are looking now with a real broad mindset, what are the needs not only in North America, Europe and the G7 big countries, but also in emerging markets. They may be complementary and there may be some very unique opportunities there.

The third horizon is about understanding and driving the R&D ecosystem of the future. And you can see how I exemplify precision medicine. We will give you today's entry into oncology as one example. But horizon three clearly will push us into different boundaries -- diabetes, inflammation, neuroscience.

I don't envision over the next five years that we will continue to treat all patients as defined by nomenclature in old textbooks. It will be much more patient and molecularly defined.

But also how do we explore the great innovation capability outside our own Company and clearly extending our biotech collaboration will be one important facet. But another new dimension that we're very excited about is open innovation, working much closer with universities in a network fashion and we are actually in very advanced discussion with a couple of open innovation laboratories hopefully on both the east and west coast in the very near time.

So from these three horizons, let's exemplify first with our biotech capabilities and move to the next slide, our portfolio supported by leading drug design capabilities as headliners.

On the left side of that page, you can see today's drug design capabilities -- peptide, naked antibodies, conjugated vaccines, antibody drug candidates. I feel convinced that we have in today's renewed Pfizer one of the best among the top three in this industry to do sophisticated today's biotech product.

But our ambition goes far beyond that. You can see on the right hand how we have moved into new territory in designing antibody-like structures that are module based, smaller, can be tailored for different tissue distribution, half life and to deliver more than one mechanism of action. And let us now just look at one example of how we are already putting that into practice.

If you turn page to a dual acting anti-angiogenic CovX body, so this is one of our several capabilities to design highly tailored multi-functional biologics. This work comes from our CovX biotech group in La Jolla, California.

And all of you are familiar with Avastin, what has been a real breakthrough in biologics used for control of angiogenesis and [growth restoration] of solid tumors. On the other hand, I think we start to perceive that we do not reach the full potential of starving the tumor blood flow.

There is resistance mechanisms and there is a (inaudible) of factors used. So in this bi-functional antibody, we have one arm of the antibody binding the VEGF target of Avastin as firmly as Avastin does and on the other hand, we have added another target, Angiopoietin-2, that we believe is of importance in blood supply to tumors.

And indeed one of our competitor companies, Amgen, have shown that an angiopoietin drugs delivered a very interesting [signal] in ovarian cancer. So now move to the right hand of this page and look at the preclinical model that will exemplify what our aspiration is to achieve in clinical studies and you can see the growth curve for a solid tumor in an experimental model over days.
And you see the two curves in orange and green that are the Angiopoietin or the Avastin-like CovX body (inaudible) and you can see the typical data most laboratories would see, a small but significant growth [reservation]. And now look at the bifunctional agent, how it nicely performs and outperforms both of the two agents together.

This is not a one-off example. We have a number of similar constructs in oncology and actually also in diabetes where we have managed to put together novel active peptides to deliver more than what one of them can do.

This particular CovX body that I had the pleasure to share with you is just now being dosed in patients. From bifunctional, let's touch upon horizon three and turn page to targeting lung cancer treatment in patient subsets.

And oncology is of course ready now for more precision medicine but the great opportunity is also to embark into diseases like diabetes and neuroscience. Here you can see one of our drugs, Crizotinib, that was originally developed as a c-Met inhibitor to target solid tumors and also resistant mechanism.

That drug had a second reactivity against a kinase called ALK. While we were pursuing the drug for c-Met, groups in Japan and Harvard demonstrated that the ALK target was also abnormal in a small fraction of lung cancer and acted as an oncogene [addiction] mechanism.

Our team picked this up quickly and expanded a Phase 1 cohort of lung cancer patients typed to be ALK1 fusion proteins positive. And you can see at the bottom of this page here overall response rates in an advanced lung cancer population that experienced multiple rounds of chemotherapy 65%, disease control rate of almost 85%.

If you read some of the [investigators that have been involved] they have been astonished by the data and found it unprecedented. And in this type of patients, it has been perceived that you would've expected with conventional chemotherapy to see 10% response rate.

So this emphasizes for me and for us not only that Crizotinib is an exciting drug, but about the powerful way of combining drugs with precision medicine. And if you turn page, you can actually see the progression-free survival of the patient in non-small-cell lung cancer treated with this inhibitor. And these are selected patients, some 5 to 10% on non-small-cell lung cancer that have this remarkable change.

And what's interesting to note is not just the overwhelming response, but if you look on top with the small numbers, you can see the number of weeks. Some are like 24 plus, 25, 45, 50 plus and the plus indicates that the patients are still in disease control under therapy and we don't know yet for how long time and it hopefully will be for many, many weeks or months to come. And this is still treating very advanced cancers and not treating first-line patients with this abnormal fusion protein.

From Crizotinib in cancer, I want to move to other Phase 1 and Phase 2 programs that we have that give you a flavor of what the new Pfizer is putting its investment behind and what could refuel our Phase 3 pipeline. Exciting drug programs progressing to a proof-of-concept is the title of the slide.

The first examples are in diabetes, an area you haven't seen that much from Pfizer before, and we're just looking at clinical data that show very encouraging results for long-acting GLP-1 proteins based on the CovX scaffold, a once-a-week or maybe even a once-every-two-weeks dosing, and an OAP peptide that is a GLP-based drug but has a quite different receptor signaling and showed profound body weight loss in clinical studies.

And an SGLT2 drug that seems to provide very powerful glucose control and with no issue with body weight gain. These programs are now moving forward and nearing proof of concept.

Rheumatoid arthritis where we obviously are a very strong player on the market with Enbrel in Phase 3 with tasocitinib and now another compound giving a very exciting proof of concept. Here we're trying to do the best of steroids but with minimal
risks on bone. And we have created a dissociated completely new chemical scaffold that hits the same receptor as prednisone but shows much better tolerability in patients suffering from rheumatoid arthritis.

The third bullet point relates to our vaccine [coming behind], Prevenar 13. We have reviewed our proof-of-concept data from Meningococcal B vaccines for adolescents and the data really looks like robust immunogenicity responses covering a broad range of Meningococcal strains and it’s encouraging data that makes us prepare plans for Phase 3 studies early next year.

Inotuzumab relates to a sophisticated antibody drug conjugate (inaudible) linked to a CD22 antibody and combined with rituximab has shown to us very powerful responses in advanced refractory diffuse B-cell lymphoma and the data supports our preparation for Phase 3 in the near time to come.

And finally, it’s somewhat early in our pipeline, we have been the most successful company in managed cholesterol for hypercholesterolemia patients and we are now embarking on a very exciting completely new approach using a biological and monoclonal antibody against PCSK9, a genetically defined target linked to cardiovascular risks.

And we have shown in Phase 1 study rapid profound lowering cholesterol beyond levels we’ve ever seen before and still with good tolerability. These were just a few glimpse of what we have in our pipeline and of course it’s still early clinical studies and different data might emerge but it certainly looks like very exciting opportunities here.

Let me bring you to the final slide that shows the Phase 3 pipeline. This is our late-stage pipeline of today. This is the pipeline we’re trying to revitalize and refuel with the early to mid-stage programs I shared with you. And let me just remind you of some excitement in the late-stage pipeline of today.

We launched Prevenar 13 for the infant indication. We are now collecting all the data for the other indication and reviewing those data encourages us in being very strong about filing end of this year in Europe and US for other indications. We are still obviously on the data review but so far we have been encouraged about what we see coming together here.

Apixaban, you have probably noted in late August, early September the principal investigators announced data in our stroke and atrial fibrillation trial that we run together with BMS, our for oral drug for a new generation of thromboembolic treatment and the drug really showed compared to an aspirin and warfarin intolerant population [with good] half the risk for stroke or other cardiovascular events while maintaining a very good profile on bleeding.

And finally, tasocitinib that I just briefly mentioned is moving ahead in rheumatoid arthritis and so far we’ve been very excited about this drug, the for oral drug, based on proven mechanism genetically in man showing very strong ACR values in early clinical studies, on par with the biologicals but providing the convenience of a for oral pill.

And obviously we would be extremely proud to move that drug to the market as the first for oral drug in a decade at least to be a meaningful drug for patients in rheumatoid arthritis and with potential for many other inflammatory diseases including psoriasis. It was a privilege to share with you where and how we are moving the new Pfizer forward, how we look at the next generation of drugs, our early to mid pipeline; exciting science under a strong business management, identifying the true data we need to achieve in order to make high-impact drugs that [met this anticipation]. And I look forward very much to further conversation with you. Thank you very much for your attention.

QUESTIONS AND ANSWERS

David Risinger

So I guess just to start off, maybe you could provide a little bit more context. Obviously you focused on the early-stage pipeline because that is your responsibility.
Maybe you could characterize the business unit responsibilities for Phase 3 and how they have been populated with the talent to ensure that they develop the drugs appropriately in Phase 3 and in Phase 4.

Mikael Dolsten

So, the way we want to build this and you know the slide that I referred with the continuum of science and business is obviously in the business units a more deeper focus on execution in large trials and regulatory interactions and understanding payers. So it’s really a continuous dialogue between the science and the business on the R&D side and the business and the clinical science in the business units.

And obviously it’s complementary skills and people can grow and develop I think in a very exciting way in these two different areas [the R&D] on the business units. But of course on the business unit side, it’s more about managing very large global trials [in thousands of patient numbers] while on the R&D side it’s about smaller focused trials to identify the right patient population, the dosing regimen.

We work extremely closely together and I think this enables us to put in place a continuity in our way of organizing science and business but at the same time, allow a stronger focus. In particular, when you’re a large company, I believe this stronger focus on certain areas translating science to proof of concept, preparing with a project plan for the next step and then having a commercial framed late-stage clinical development that really pushes these studies into registration and prepares for market launch; I think it’s a very good way to organize and obviously we are mixing internal people from the legacy companies with good recruitment.

David Risinger

Great. Maybe you could talk a little bit more about your background. What the lessons learned for you were at Boehringer Ingelheim.

Obviously that was a highly successful organization and you were fortunate to work at one. There aren’t many highly successful organizations in R&D in the drug industry at least in recent years.

So maybe you could talk about the learnings and then what you can do at Pfizer. Pfizer has struggled over the years.

Do you see opportunities for further cost cuts? Do you see opportunities for investment in areas that Pfizer has not invested in? So maybe you could talk about how you are going to change things at Pfizer as well.

Mikael Dolsten

Yes, it’s a good question. You know, I’ve had the privilege to work in a handful of different pharms and I have learned in each of them different things. And to use Boehringer Ingelheim as one example, that organization was smaller although it’s still a mid-sized pharma and I think there I got the real appreciation on how you -- when you integrate science and business, how powerful it is.

And I think the structure we put together here translates that type of closeness but under a much more powerful organization that have reach across the globe into more markets. Boehringer Ingelheim also came out of I think originally a German culture of very strong emphasis of technical excellence like the Mercedes of the life science.
And that's something that I found very important and it's bringing in myself and with the culture and the recruits from the legacy organization as well as from other companies, you need to always be on top of the details. That doesn't mean you get buried into the data.

But in order to move quality things forward, you need to from the science bench up to leadership really scrutinize and challenge the details. That's the quality criteria we put in place.

In the end, the success is really to have a very high bar on talent so that this happens everywhere. Because in a large company, it's not about one individual, it's about the culture and the values you create.

And that's why I gave some example of outstanding people that we're bringing in while also developing people internally. So I would think you will over the next years to come will see the different horizons that I alluded to.

Today the firm focus is on what is a truly differentiated drug. Some of the next-generation therapeutics which are innovative but have high feasibility for success at the same time, a mix of new science and proven mechanisms.

And then trying to really change the way we look at innovation, creating new ecosystems with academia, and we have some very exciting open innovation plans that we hope to be able to announce in a couple of months with some of the major academic medical centers here and abroad. And also touch upon precision medicine.

Today we spoke about oncology. In the future to come, I obviously hope to sit here and show how we apply precision medicine in diabetes and neuroscience and inflammation and changing more the track record of this industry, trying to move novel drugs into the same clinical trials over and over again.

I think combining rigor, unique drug design, precision medicine and also global needs in emerging markets, we open up great growth opportunities. And it comes back to when science and business meets, that's when we can really do something unique and different.

So that [sort of kind of flavors] I together with the executive leadership team are pushing in R&D and in the business units. We will always look at what is the right and best way to invest our capital, in internal R&D, in external R&D, and we will be very resourceful and deliberate with the dollars we invest.

David Risinger

That's great and just to take that a step further and not to belabor the past, but I think the investment community is hopeful that Pfizer doesn't pursue deals like Dimebon in the future which obviously you weren't there for. But the data was too good to be true and then it was too good to be true.

And so, what is your role in working with your innovation? Obviously you're not in charge of licensing, you are not in charge of Phase 3. But can the investment community be confident that you or the people that you hire will shoot down the next Dimebon deal that's proposed to Pfizer? And also, can you reach out and reel in better investment opportunities or are you focused in a different area of the Pfizer R&D organization?

Mikael Dolsten

From time to time, there will always be companies making big bets. But obviously moving forward, you would like to put your best in areas which looks the most promising, supported by strong science and good clinical performance.
Working together with Ian Read who heads the business units, all of the business units, Ian and I speak actually a lot about the question that you raised. And we are going to work as two partners when it comes to licensing or bringing in external assets.

Whether they are [earlier] assets I clearly will look forward to his views about their commercial prospect. I know Ian welcomes my contribution to his team when it comes to the scientific rigor in analyzing those data.

And we have actually put in place a number of criteria to learn from deals we've made and other companies have made and that includes really looking at what is the target you want to hit. Do you reach the drug concentration that is required, do you [see a broken] or stimulating the target in the right tissue in animals and translating to the same effect in man. And if the clinical data performed at top centers which have delivered other data that are historical good comparators or is the study performed in very few centers of unknown performance.

So we clearly are putting kind of a criteria in place for internal and external deals in order to make sure that we maximize likelihood for success. On a single deal, you will never know what's going to happen around the corner. But obviously for a handful of deals, you would expect to see like the compounds I shared with you here, that they really are differentiated robust science performed by people with good track records.

David Risinger

Great. Maybe you could just talk about Alzheimer’s. Obviously that’s already moved into Phase 3 with bapineuzumab. If you could talk about the different mechanisms for Alzheimer’s, any thoughts you have on bapineuzumab and if you could weave in any comments on the delayed readout of Phase 3 for bapineuzumab to 2012.

Mikael Dolsten

Yes, we are appreciating our alliance with J&J in the Alzheimer's field where bapineuzumab is our most advanced disease modifying therapeutics. So on the one hand we are encouraged that there seems actually to be I think growing support for the amyloid hypothesis which bapineuzumab is working against.

Although it certainly is a hypothesis that still remains to be proven when it comes to slow down or halt disease. We showed earlier Phase 2 data using PET imaging that nicely showed that drugs such as bapineuzumab can remove amyloid plaque that most likely is toxic for the brain.

The big question for bapineuzumab and other drugs of this nature is how you define clinical studies where you're able to intervene early enough. Before in this case toxic amyloid already have [cascaded] irreversible damage to the brain. And obviously we remain encouraged that this [four] major bapineuzumab trial will have a sufficient number of patients that are treated at the right stage of the disease.

We're also pursuing additional mechanisms like amyloid vaccines and a [full-on] antibody called [conisimab] and I think there will be lots of learning in how do you design studies where you can go in earlier patient populations, have a higher likelihood of making a true impact, but still being able to read out robust signals within maybe 18 to 24 months. I hope that gave you a little bit of a flavor how we look on the amyloid area.

Clearly there are different aspects of opportunities in the Alzheimer’s field now. We are engaged in additional disease modifying but also symptomatic drug treatment.

I think you really need to look at the future for Alzheimer’s as a combination of different drugs that target different -- the mechanics that leads to decline in brain function and tissue destruction as well as augmenting patient performance, symptomatic treatment.
As we have been very successful with Aricept, we also believe there's room for additional cognitive enhancers affecting also other parts of the Alzheimer's and overall behavioral aspects. It's a field that has tremendous opportunities but it's difficult and going to be a high-risk field for some years to come and you need to carefully select the investments you do there.

Five years from now, we probably will be in a much better situation with patient certification and building on the first generation of active Alzheimer's drugs and learning from those. We have a big effort and I believe we and J&J is one of the companies with the largest capabilities and opportunities here but again, it's an area of great risk and great reward.

David Risinger

And any other color on the timeline delays and what caused that? Obviously the timelines are far different than were discussed let's call it 18 months ago at Wyatt. Could you just educate us on that?

Mikael Dolsten

I'll just say that we obviously learned a lot about the potential benefit and risk and tolerability profile of antibodies used for immunotherapy in Alzheimer's and that led to a need to move a measured pace and to make sure that the program was managed in the very best way.

And that may have affected some timelines but it was the right thing to do for the program. And as you know, it's not only the disease modifying studies, but we also have substudies that involves imaging and the time delay really also relates to the clients want to see the complete trial picture.

And we think to use those types of drugs right, you benefit from seeing the effects on amyloid in the brain and understanding the time course of that to happen, doses, as well as the disease modifying data. And it is on one hand frustrating when you work on new mechanisms and want to be a pioneer and move fast. On the other hand, you have to be thoughtful and move with measured pace. So I have really no news when it comes to timelines. They are what they are and as we have communicated with J&J.

David Risinger

Okay, thank you. I should open it up to the audience.

Unidentified Audience Member

Just going back to the question of the ROI for research which is obviously an interesting area, what do you think the fixed costs of research ought to be in Pfizer? Do you think there's scope for further contraction of your fixed costs as you are more open to externalization? That would be one question.

And the second question would be, how long do you think you need to let a program run for or a series of researchers run for a particular target before you decide it isn't going anywhere and maybe these researches are not going to lead to anything longer-term and so we need to maybe upgrade the staff that we have? Can you do that? Because some of your competitors are taking that titration approach and saying look, we can make a call on whether we're going to get a return here after a period of time.
Mikael Dolsten

So when it comes to sites of R&D, like I said earlier, we regularly review what is the best way of reducing our capital to maximize return for shareholders. And that includes assessing the various therapeutic areas that have been discussed, the likelihood for clinical and regulatory success, the size of the product that may come out from those areas, advances we're making in drug design.

Some of them I shared with you that may increase return of investment in some areas but still leave other areas as more challenging. So we aspire to continue to assess how to deploy our capital best and that relates to where we deploy it within our R&D and the sites that we have inside R&D or for external acquisitions.

So I feel very flexible that we need to use the funds where they can best translate to new medicine and revenue creation with good ROI. We're not kind of fixed on a percent. I don't think that's the way to approach it.

Unidentified Audience Member

So I guess my question is, I understand the focus on capital allocation and commitment to research. But what if anything could have changed?

Because it sounds like those decision-making processes which are all eminently sensible should have been existent previously and are still in existence today. So has anything changed or is it just still the same?

Mikael Dolsten

I think in this industry, maybe some years ago, we kind of were of the view that a large company needed to invest 15 to 20% of revenues in R&D and that's it, right? In order to replenish and be able to control the future destiny.

I think we feel much more flexible about that. On one hand there are great opportunities externally in the biotech industry, in smaller specialized pharma. So we want to have room for flexibility to decide what we do internally and externally and we don't want to lock ourselves into fixed percentages as well as feeling on one hand that obviously we need a certain size and commitment in internal R&D because it's kind of the backbone for our organization.

But I don't think it's right to say there should be a certain number whether it's for Pfizer, Merck, Roche or Novartis. I think you need to be more flexible in the future and look upon networking organization also as a way to get more out of your internal resources internal resources and adapt them towards where you see the feasibility increasing.

When it comes to projects, you know really what I spoke to today about trying to bring business and science closer together involves setting very firm criteria, what we expect the drug should deliver at a certain stage of clinical development and particularly at proof of concept, when it comes to efficacy, convenience of administration, tolerability profile. And we put great pride in having rigor and focus on detail for this.

If we don't keep those criteria, there needs to be some great learnings why we fail to convince me and our Chief Scientific Officers why we should be able to do a better drug. And clearly sometimes we may understand that the drug failed because maybe it didn't reach the concentration in the brain if it was an Alzheimer drug that we were aiming for and that may encourage us to go with a second generation.

But I don't believe that you should dig yourself deep into commitment in certain mechanisms unless you have very strong data that are valued for human disease, genetic evidence or evidence by other drugs. So you need to be like all business opportunities flexible and change your commitment when you see the environment or the markets have changed. And maybe in science in
the history of many of the big companies, it has been a little bit more of technical driven rather than this mix of science and business that we want to create.

Unidentified Audience Member

I think my question was more or less asked but when you think about percentage of drug development going forward, would you expect the percentage outsourced to CROs in the future to increase or to stay somewhere where it is today?

Mikael Dolsten

I think we overall as an industry will see more externalization. That's because we want to focus on what is our true core capabilities.

I mentioned a couple for you today when it comes to being able to do biological drugs with really unique features, the most patient friendly small molecules of this world. So those capabilities that are necessary we want to really be able to focus internally but many areas of R&D migrate from being strategic capability to support and commoditization.

I think at the large companies, we don't need to own all of that. In fact, it might be better to collaborate with external companies that specialize in those segments and that allow us again to move our capital in a more flexible if we increase or decrease a certain therapeutic area, a certain type of drug or a stage of our pipeline.

So yes, I think the industry as a whole, and that is certainly my own view for Pfizer, we need to reduce the maturation of biotech and serial companies to our advantage while we really try to own what is the true capabilities that make us unique and different. And I hope when you listen to some of the drugs I presented today that you saw drugs that you haven't heard in each of the presentations you've been at before and they relate to strategic commitments for us. We want to win on the science and dominate the field when it comes to what we can do versus others.

David Risinger

Great, I guess I would like to ask a question about odds of success. What I found is that many drug companies still are working off of the wrong benchmark data.

And when I say wrong, that is [tough] data looking at the likelihood of a Phase 1 drug moving to Phase 2, the likelihood of a Phase 2 drug coming to market. And obviously most drug companies have the challenge that they are aircraft carriers, they behave like aircraft carriers, and they have historical benchmarks and obviously for their internal projects, each of the scientists wants to argue that their project has a better likelihood of success than the industry average.

But the benchmark industry average is totally wrong. In fact, it's probably two to three times as high as it's supposed to be given what has happened with R&D failures in the past five years and what has happened with regulatory hurdles. So I guess my question is, are you resetting those bars within the organization such that more reasonable odds are applied and thus more reasonable revenue projections are given to the management team and the Board relative to what was done historically at Pfizer and Wyeth?

Mikael Dolsten

Obviously, we recognize that we, Pfizer, don't feel that we have delivered as much as we would like to from R&D when it comes to new medicine. Obviously I would've liked to see multiple launches every year from a large R&D organization.
And that’s probably true for most heads of R&D for the peer phamas of this industry. So I think you need to recognize that and not try to look at the past with eyes that doesn’t see the true picture.

So the benchmarks need to be the real one and the way we work with our Chief Scientific Officers is also to make them aware of how much it costs to run a full therapeutic area, every single dollar that you need to spend in order to run that area, so that it’s really managed as a business, almost like a P&L, where the revenue for them is the proof of concept and the value we could see in that when it translates in the end to a high impact drive on the market.

So on one hand, we need to reassess and be realistic and look at which areas from small molecule, large molecule and some vaccines seems to deliver short-term best return of the investment and balance the investment that we do so that we get an overall return that’s favorable. And that’s true also for therapeutic areas.

Some are more challenging and expensive than others today. But at the same time, I think if we implement some of the changes and stop doing over and over the same type of R&D, we should obviously be able to change the game.

And I discussed a few things that I believe is game changing. Drug design with much higher tailored capability. In order to beat the generic drug, it’s easier if you have a new drug that are tailored for patient subsets for which the generic never was developed and your drug may be skillfully studied with the right combination regimen or like I shared with you here, by self-contained multiple mechanisms.

And we also need to move away from a feel that R&D needs to be performed in very formal structures whether huge traditional R&D sites or very formal biotech collaboration and we are very much open to more creative new partnership, option deals, as well as open innovation labs where we may partner with an absolutely top academic medical centers, enable them to bring drugs into Phase 1 and study in unique selected patients properties and then for us to have an ability to internalize them forward.

So I think once we open up more flexible R&D structures, better tailored drug design really moving beyond today’s traditional concepts and start the transformation from patient population defined by traditional diagnosis of diabetes, Alzheimer’s, rheumatoid arthritis, to more sophisticated patient subsets. And indeed, I mentioned Crizotinib but actually also bapineuzumab, the Phase 3 study was designed using two different genetic markers to try to enrich the success. So I don’t think we should step away from the view that five years from now, it would be reasonable to assume that some of the benchmark figures should be improved.

David Risinger

Great, well we should probably wrap it up there if there are no further questions. Thank you very much for joining us.

Mikael Dolsten

Thank you. It was a pleasure. Thank you for the conversation.