Richard ([00:00](https://www.rev.com/transcript-editor/Edit?token=ASsHogHz1eW5W36S3Cjc51s1P_NsrCD9KYUaRKMaug4Z8VXfS67DS5PCAu-rfQGWCfWYh6nj56kOwLvVLzmmhumOrlw&loadFrom=DocumentDeeplink&ts=0.14)):

This podcast is intended for healthcare professionals outside the United Kingdom and the United States of America only. Welcome to the Medical Insider COPD by Boehringer Ingelheim, a podcast offering a breath of fresh air to clinicians treating COPD across the world. My name is Dr Richard Russell. I'm a consultant chest physician at Lymington New Forest Hospital in the United Kingdom, a senior clinical researcher at the University of Oxford as well as the editor-in-chief of the International Journal of COPD. It’s my pleasure to be your moderating host for this season of Medical Insider COPD podcast. I'm here to bring you news and insights in COPD, right from the source directly to you. So, thank you for joining us today. Be sure to look out for our other podcasts and follow Medical Insider COPD to ensure you do not miss any of our exciting podcasts in this series and the ones we’ve done in the past. On today's podcast we're going to look into a publication, which I believe is worth reading and important. It's entitled ‘Regular, sustained morphine for chronic breathlessness: A multicentre, double-blind, randomised, controlled trial.’ And also we are going to look at an emerging and important topic in social media, looking at the winter and the effect the weather has on respiratory disease. But first I'm proud to introduce today's guest, who'll be here with me to discuss the topic of phenotyping in COPD. My guest is Arschang Valipour, professor of respiratory medicine from Vienna. Welcome Arschang.

Arschang Valipour ([01:39](https://www.rev.com/transcript-editor/Edit?token=ibrLG-p0yMBCzfaTTEeEmTkBtY-Ir_ufZta9hRVZAMKynNlpFWYFbgOyyVbTXd9LEn8mm_Kg_XuLTYfEKq1bPgTwWdQ&loadFrom=DocumentDeeplink&ts=26.6)):

Hi, Richard, good to talk to you.

Richard ([01:4](https://www.rev.com/transcript-editor/Edit?token=yHXNlTeqbkJZUWUcdq6ovrsa-9MGIqHOaWRuQdeF86anbF9KjiyLh96k--39pFIaMp7Oq_lxgPx87Q9vG2uWqoZHPv4&loadFrom=DocumentDeeplink&ts=28.65)1):

It's lovely to talk with you today, Arschang. You have a particular interest in phenotypes, and we've discussed this on several occasions before, perhaps you would introduce yourself to the audience.

Arschang Valipour ([01:](https://www.rev.com/transcript-editor/Edit?token=1ugNiqHBA3HtnyHZoyNMe0Rf_mJc0HehSFOIM6WVCd8k10PvKz_biPWmyq_oiy10ZW3lx5dXi3GKoldbw37Vrycmui4&loadFrom=DocumentDeeplink&ts=37.94)49):

Absolutely. I'm working as a pulmonologist in clinical practice now for more than 20 years. I'm currently the head of department of internal medicine, pulmonary medicine in Klinik Floridsdorf in Vienna. And I'm also the director of the Karl-Landsteiner-Institut for lung research. And I have a specific interest in COPD. I've been working with COPD patients in clinical trials now for more than 15 to 20 years, since COPD phenotyping, as you have mentioned, is a very specific interest of mine. And I'm very happy to talk to you about this topic.

Richard ([02:18](https://www.rev.com/transcript-editor/Edit?token=EAHdyXqxT6LUJNWv9HqkgjZyqH7qqWSUvjC4osrWCr-oD_yA3rc5zWVF7kZtiC2FXq3Vazp_ukc7GEJToxV6Yyy35H4&loadFrom=DocumentDeeplink&ts=69.27)):

So phenotyping and COPD is important because we now want to be precise with our medications. We want to give the right medication to the right people. So perhaps you can unpack for us how do you go about phenotyping your COPD patients?

Arschang Valipour ([02:31](https://www.rev.com/transcript-editor/Edit?token=GLlKsqhfQoEYddSJAIzbHISUQyvHQOcaG0dSLp3DNOsBGN93CFNX-wSD0JjEBi24dd68llpGKoYODwz7stV2i8z2xqg&loadFrom=DocumentDeeplink&ts=82.42)):

Well, in our clinical practice, we try to adhere to something that is applicable and useful. We have basically now used the Spanish guidelines for COPD phenotyping that have been published in 2014. That basically have made a very simple attempt to use four main groups or four phenotypes of patients. Group one would be the non-frequent exacerbators. These patients comprise about two third of the general COPD population out there. These are patients that are more or less stable on LAMA/LABA medication and require pulmonary rehabilitation. And these patients need appropriate follow-up, but usually they are stable for many, many years. And then we have the exacerbators. The exacerbators can be again, sub classified into exacerbators with symptoms of chronic bronchitis. These are patients where in the past, we have used to call them blue bloaters. And then we have the so-called pink puffers in the past that are now called exacerbators with predominant emphysema.

Arschang Valipour ([03:37](https://www.rev.com/transcript-editor/Edit?token=9sQMskzmdtUGbJiXECJvDQihx01ruKyc980PeQh46OYs4nBtOMqVVXO6ZtBaEJgdAqhaJFeiPOX529omFPJVl4bi1rY&loadFrom=DocumentDeeplink&ts=148.1)):

The fourth phenotype would be the combination of asthma and COPD patients. These are patients that have asthma as a comorbidity and we used to call them asthma COPD overlap syndrome. Obviously, today we are trying to avoid that and rather say, we're talking about a co-morbidity rather than a syndrome.

Richard ([03:56](https://www.rev.com/transcript-editor/Edit?token=EuGVpAF2IarsEl6cXjoU94UMYxWPuLCKiLbvztDnZrm8XbI1Punyk31OiFCiahTMFRBGaoUTu6SftuJNMXsaFEzkOME&loadFrom=DocumentDeeplink&ts=167.44)):

Can you tell us, what do you think about the prevalence of these phenotypes, which are common, and which are not so common?

Arschang Valipour ([04:00](https://www.rev.com/transcript-editor/Edit?token=7DuSApaL1qpLiq1-NtsqYFIZmwPFZN8XnTzc6t2lW4j0O0wXHwNaujxSbwNgirqb-DS1ZxH8Qw95Rf47RlvoFSNvsIA&loadFrom=DocumentDeeplink&ts=189.83)):

The non-frequent exacerbators are the biggest group if you want. They are about two thirds of the general COPD population. We have conducted a trial in Central Eastern Europe where we have tried to phenotype these patients as well. And we found that around 65% of the overall population had less than two exacerbations. And these patients basically are also symptomatic. They have a CAT score on average of 16, but they don't have frequent exacerbations. And about one third of patients comprise basically the rest within this group. There is again an almost equal split into a one-third of patients with chronic bronchitis and exacerbations, one-third of the emphysema subgroup, and one third of patients who have asthma.

Richard ([04:50](https://www.rev.com/transcript-editor/Edit?token=bv8uyiT3F0ncXvucOC04GwjMmhFmv93ppJiyv_iJ4nNpIyw8I_-1Nxda4lIjwl01DoOI3yfxUoVSIRzhM5OZt-5eRrs&loadFrom=DocumentDeeplink&ts=240.32)):

Thank you very much. That's very helpful. So let's talk about these people who are non-exacerbators. These people who are breathless. What's the best way of managing these people? And what do we need to focus on?

Arschang Valipour ([04:5](https://www.rev.com/transcript-editor/Edit?token=MUTanp4E_bFdBO7SiFWOinUlhq9RGB2NLwDJ4YCVEfEWcU299FgeIiwsIFbtuOF0mA_FZoj7wipgWs8P1bRGojFv1BM&loadFrom=DocumentDeeplink&ts=250.15)8):

Well, if a patient presents to us with COPD for the first time we have to assess the symptom load entity limitations in exercise capacity. Assessing exercise limitation is actually not so easy because many patients who adjust their lifestyle to their dyspnea level basically may not be as active anymore. So, it's very important to make sure that these patients receive appropriate medication. And appropriate medications for symptomatic COPD patients is LAMA/LABA combination therapy. LAMA is a long-acting muscarinic antagonist, and the LABA is a long-acting beta agonists. And we are all aware that the combination of these two compounds provides much better bronchodilation. It improves quality of life to a higher extent than a mono bronchodilator. And it also improves exercise capacity. And I will say this is the basic therapy that the majority of these patients should receive.

Richard ([05:54](https://www.rev.com/transcript-editor/Edit?token=pHzk4RhYAy-otZ8gUZlFgnIxjV1lniydoWJDrDq5MGDmOVD4Hq8XX516h5c9724T89gqkcMrk32C15iQ1j-kpFbUM2I&loadFrom=DocumentDeeplink&ts=322.13)):

So, it's very clear that we should really be starting with optimising bronchodilatation with a LAMA/LABA dual therapy, which is important. Getting the drugs into the patient is also really important. And I just want to ask your thoughts about inhalers, inhaler techniques, and whether we need to be thinking about that in a critical way.

Arschang Valipour ([06:11](https://www.rev.com/transcript-editor/Edit?token=fasygdHScRWo8R8qvfFO4wrBmlRgunIV55UawQs0q7e28zeTUg_1yWdonKSpUznRthTTVQJEP_H-TEsebLuR_rcs3bc&loadFrom=DocumentDeeplink&ts=340.34)):

Yeah, in this context, it's not only about taking a tablet, it's about actually prescribing an inhaler and making sure that patient is able to inhale the drug that we have specifically chosen for this patient appropriately and sufficiently to ensure good lung deposition. We basically have now three different inhalers in the market. The pMDIs, which require appropriate coordination of hand and mouth. Then we have the DPIs, the dry powder inhalers, which require a sufficient peak inspiratory flow rate to make sure that the compounds, the drug gets into the lung all the way down to the small airways, which actually is not so easy. And we know from many studies now that some patients with COPD in particular have difficulties in generating the sufficient peak inspiratory flow rate to get the dry powder inhaler compounds into their lungs. And then we have the Soft Mist inhaler that provides us the opportunity with a very slow mist to get appropriate lung deposition, and it's not dependent on the patient’s inspiratory flow rate.

Richard ([07:18](https://www.rev.com/transcript-editor/Edit?token=AdVCs5rV8yh991QplmAph67WMPEUQdW2bS5WsxEFdPzrZpCiISBgLIjp_yWQx3za_xZoV0BdWnN0CoqTt5Xv1vRCqx4&loadFrom=DocumentDeeplink&ts=423.21)):

So that's really helpful. And knowing how to use those inhalers in each individual patient and testing them is so critical. I want to ask you a final thing about these non-exacerbators. Is there a role for monotherapy or inhaled corticosteroids at all in these people?

Arschang Valipour ([07:318](https://www.rev.com/transcript-editor/Edit?token=DfElhrXJznsStbnClwJrsFvKFCffUMi3K8Ipv39FxY06GANCHsuGUQOCZP9OzUyRZiULDOJS8xR9cYBmSJIlY5b8cBo&loadFrom=DocumentDeeplink&ts=439.77)):

Well, in the majority of patients that we're talking about, the non-frequent exacerbators, we should not prescribe ICS.

Arschang Valipour ([07:39](https://www.rev.com/transcript-editor/Edit?token=IAyEzdaF4izoRCfFzPB_4nwK21QWEls0ztvnm5VjZC0nXcb16vJYIzvMzIxXMBIq0C8ujEX5uARijtUffBm96YZLenw&loadFrom=DocumentDeeplink&ts=462.71)):

So, if we want to prescribe inhaled corticosteroids, which should focus on the patients that have the combination of frequent exacerbations plus eosinophilia. And sometimes physicians focus only on exacerbation rates and forget that you require both. You also require eosinophilia and the history of exacerbations where we have the best risk benefit profile of inhaled corticosteroids. For all the other patients that have exacerbations without evidence of eosinophilia, it's more appropriate to look into other pharmacological treatments or maybe even non-pharmacological treatment options rather than escalating from dual bronchodilation to triple inhaler therapy.

Richard ([08:19](https://www.rev.com/transcript-editor/Edit?token=bJKoKovenVy8AQXJ2Dm2PXru-IuVKCYnqdFGVGLK03LwYp4DxmYD7N9dhNn0UXTRqT2ffiA4PT7GYi8V-pjxDy9_AZM&loadFrom=DocumentDeeplink&ts=510.8)):

Moving on now, you've mentioned about the exacerbator phenotype and you pick out the two different types, it's emphysema predominant patients, and chronic bronchitis predominant patients. Can you explain that a little bit more on the differences maybe between how they'll present and what we can do for them?

Arschang Valipour ([08:34](https://www.rev.com/transcript-editor/Edit?token=nWSqspbRo8xqEMWS2URH8YobGLns9DVtbJSixyOf1CZbHQ-kXRnL3INVqbht5tF4V7UhDnFOYR-v3hF9kjYppkD3CPw&loadFrom=DocumentDeeplink&ts=531.83)):

We're talking usually about patients that have impaired quality of life and symptoms despite already receiving the basic of COPD treatment, which is the combination of LAMA and LABA. But if the patient still is symptomatic or has exacerbations, I think we need to spend more time and do a little bit more investigation into these patients to assess the underlying pathobiology. Chronic bronchitis by definition is basically nothing else than symptoms of cough and sputum production on a regular basis. But what has become very useful more recently over the last couple of years is a low threshold of performing CT scans in these patients. And we can use CT scan also to assess and differentiate patients with chronic bronchitis. And particularly those with emphysema. Emphysema is a diagnosis that can easily be done with a CT scan, but also patients with chronic bronchitis can be identified by a CT scan. They usually have airway wall thickening, sometimes have bronchiectasis. They have mucus plugs in the lower airways. So, we use the combination of medical history. We assess the patient in terms of a CT scan, and if necessary, we also look into co-morbidities performing an echo in a patient that has frequent exacerbations, has become a crucial part of the overall assessment.

Richard ([09:51](https://www.rev.com/transcript-editor/Edit?token=nJ9tailsRXLdCAq-pojfLhx2d5Nax4DDkf3HnPpN7o6Pu825j-CVHploYNqaDlO256BJbKtWJ610fFUBBKrbZnaMtvk&loadFrom=DocumentDeeplink&ts=625.21)):

So when we've assessed them and we've defined the exacerbator phenotype in a little bit more careful way. How should we treat those people? Do you have a simple flow you follow?

Arschang Valipour ([10:01](https://www.rev.com/transcript-editor/Edit?token=iiEK29nviQnaVCYesl5UpxaFu9PcmSUZk9jSvF15-7mGbRtYGR_5Cy9OeZIaYGm_xZ4RLfFxj31utIPHNRajrYSW9Gs&loadFrom=DocumentDeeplink&ts=636.4)):

I think that if you have exacerbations, plus eosinophilia we should prescribe ICS on top of LAMA/LABA treatment. But if some of these patients may not have eosinophilia, and for these patients, if they also have chronic bronchitis, they may qualify for roflumilast or for long-term macrolide antibiotic therapy. Obviously, patients need to be aware of any potential side effects and long-term effects that is clear. And for patients that have emphysema as the predominant phenotype, but have symptoms of dyspnea that are more or less surrogates of exacerbations, we need to think beyond pharmacological therapy and potentially provide one of those novel technologies that can be providing and alleviate the symptoms of dyspnea and hyperinflation using for instance, endoscopic lung volume reduction.

Richard ([10:49](https://www.rev.com/transcript-editor/Edit?token=Q3y0PH3Rff0hGxuy9p657DIO0HsjCTdoQcIrB0wr59_nB1-BhMGmnIRJ9MoIrr9nD0jyuQOgvQxBnodZzJjSVICPVUc&loadFrom=DocumentDeeplink&ts=689.57)):

Let's come on the slightly more tricky area for a moment which was in the past thought to be difficult, which is about asthma COPD overlap. How do you see that now in COPD?

Arschang Valipour ([11:00](https://www.rev.com/transcript-editor/Edit?token=dSVhTFJbPfQBtbkBk7EQEZH0tpz1kI_sfuPJeJSKAOnhC2KN2FLpxwNrRb2OWmZQYYExdmIuSt80DBiPA4OY0lWihGI&loadFrom=DocumentDeeplink&ts=730.22)):

I would really go back to the basics of medicine, which is taking an appropriate medical history, making sure we have enough information to assess a patient, you know, the individual patient had any history of juvenile asthma, allergies, any disease, obstructive airway disease prior to the age of 40. We also shouldn't forget, however, that there is an overlap between those patients that have asthma and COPD and those that are frequent exacerbators and have eosinophilia. And as you know, many of the studies over the last few years have focused on this specific group of patients that have the combination of COPD and frequent exacerbations with eosinophilia and/or asthma. However, we should also keep in mind that the majority of patients out there seen by the pulmonologist, however, are not within this group. Those are the non-frequent exacerbators we were talking about. And these patients do not require inhaled corticosteroids.

 Richard ([11:55](https://www.rev.com/transcript-editor/Edit?token=IDMtweTISoQcRyy5E428sR8oLOKD8q5_CbfLfsUrpwJKqCqH4FA4QvtWxA4ZYIfh_gBz-7fA7Xc2SsvVFOaK-1g0aW0&loadFrom=DocumentDeeplink&ts=824.22)):

So Arschang, now we're going to come on to your major area of research interest and where you're going in the future about the non-pharmacological management of COPD and talking about phenotypes, who should I refer to you to get the best benefit from the potential of lung volume reduction surgery and lung volume reduction techniques and other interventional bronchoscopy techniques?

Arschang Valipour ([12:15](https://www.rev.com/transcript-editor/Edit?token=IDMtweTISoQcRyy5E428sR8oLOKD8q5_CbfLfsUrpwJKqCqH4FA4QvtWxA4ZYIfh_gBz-7fA7Xc2SsvVFOaK-1g0aW0&loadFrom=DocumentDeeplink&ts=824.22)):

Well, if you have a patient sitting in front of you, you should think about referring a patient for further assessment and potential eligibility of lung volume reduction techniques. If the patient has evidence of severe airflow obstruction, we usually consider an FEV1 below 50% and evidence of hyperinflation using body plethysmography with a residual volume of 180% or higher. So, these are the basic lung function requirements. In addition, when we assess these patients, we want to rule out any severe comorbidities that may contribute to disease worsening, such as severe heart failure with a New York Heart Association Classification of three or higher and severe hypercapnia with a PCO2 of 50 or higher. So we are more careful in those groups that may be driven by other sort of co-morbidities and problems rather than hyperinflation due to emphysema only. And what we do, we do a CT scan in these patients. And on high resolution CT, we assess whether or not the patient has emphysema. We assess the extent and the regional distribution of emphysema. And if the patient has evidence of severe emphysema, these patients may qualify for endoscopic lung volume reduction.

Richard ([13:27](https://www.rev.com/transcript-editor/Edit?token=OYP-ngX0LT_lqY1v-HgMSA2sFEToA2DoC64DOLQ1WnwHsJDrCSVbZhXxrHlUORo48IsNz495g5W3I7Zl0aHsJIZdtok&loadFrom=DocumentDeeplink&ts=917.72)):

And what benefits would my patients perhaps receive from that intervention?

Arschang Valipour ([13:30](https://www.rev.com/transcript-editor/Edit?token=EU9tjdeXYawzJ5czRzkeqcd_15_op5LdphkVSXk8EsAFE3NfS5t4a_mP0vVXNB4gQjbi77yBdViRghYlS3IFFk35L9o&loadFrom=DocumentDeeplink&ts=921.64)):

Well, we have at least one technology to offer now in clinical practice that is called endoscopic one-way valve therapy, endobronchial valve therapy is a technique that is delivering one way valves into airways that leads to the most hyperinflated parts of the lungs that are severely compromised because of emphysema. And with that specific therapy, there is evidence of lung volume reduction to an extent that is similar to surgical volume reduction. So, there's basically deflation of hyperinflated areas of the lung with the benefits that we have seen previously with surgical techniques, which is improvements in lung function, improvements in exercise capacity, as well as improvements in quality of life. The extent of reduction of the residual volume basically drives the clinical outcome. And if we have areas within the lungs that are severely hyperinflated, and if we are able to reduce the volume of these regions, other parts of the lung, which are usually work better, they have better mechanical properties, they have better ventilation profusion. These areas work better since the overinflated and hyperinflated parts of the lungs are being reduced in terms of volumes and also in terms of perfusion.

Richard ([14:50](https://www.rev.com/transcript-editor/Edit?token=gdkeDbvCfQlhZklLJ_1Z_VOrGtnpViPr2Tf-sG1VJwdilnD51o_qHgBd-4Kv3RlxTPFDrJgdFOmaPMAZKzo5vqTObbA&loadFrom=DocumentDeeplink&ts=1013.47)):

So, this is a really important area. It's developing quite quickly and we're getting more long-term data. I know also you've been researching some newer techniques. Can you tell us about those?

Arschang Valipour ([14:59](https://www.rev.com/transcript-editor/Edit?token=OPNI_n45eUxStYFiWFSboCUwm2QNyXvNP7ihoo1rMJLHwpTIRdjLOPEphtttQfLern_G4aCdarRji-Cnk6CuL4dgbZk&loadFrom=DocumentDeeplink&ts=1051.41)):

We are currently investigating two different technologies as well. We have published first-in-man, sham-controlled randomized trials, where we have looked into safety of these technologies, but we also have some early efficacy data. The first technology would be targeted lung denervation. It's an endoscopic technique that ablates the peri-bronchial vagal innervation at the level of the main bronchi. It's during one single procedure, it's takes about 45 to 60 minutes and it's been done under general anaesthesia. Radio frequency catheter is being deployed through the working channel of the bronchoscope, and this is being placed in, within the central airways, subsequently and we can ablate basically the parabronchial innervation of the vagal nerves and the first set of results all the way up to two and three years follow up have shown that we can reduce exacerbation rates and we can also reduce symptoms of COPD.

Arschang Valipour ([16:00](https://www.rev.com/transcript-editor/Edit?token=IDMtweTISoQcRyy5E428sR8oLOKD8q5_CbfLfsUrpwJKqCqH4FA4QvtWxA4ZYIfh_gBz-7fA7Xc2SsvVFOaK-1g0aW0&loadFrom=DocumentDeeplink&ts=824.22)):

The other technique would be bronchial rheoplasty. And bronchial rheoplasty, we have just recently published in the blue journal just a few months ago, is another technique that is non-thermal and it is intended to ablate using electrical implants that are delivered to the airways again within the central airways predominantly and with evidence of regeneration of the mucosa and ablation of mucus producing cells. And for both of these techniques, we are currently assessing not only safety, but also efficacy in prospective sham controlled randomized trials.

Richard ([16:35](https://www.rev.com/transcript-editor/Edit?token=-ZyPleCIIv4bfabdyrZSwaHygifJwqtbki2fcBMPI6OglmFA73VXOH5Y9b2GLFBR1DmMg_LTcYzMPiJLSv0yU2U6tMg&loadFrom=DocumentDeeplink&ts=1258.95)):

Professor Valipour, thank you very much for that. For me, you've unpacked a complicated thing and made it actually quite simple, looking at exacerbator phenotype, looking at then subtypes of exacerbators and then also picking out those people who we may be able to improve further with new interventional techniques. Do you have any closing comments you'd like to make?

Arschang Valipour ([16:55](https://www.rev.com/transcript-editor/Edit?token=nBaHANAc6psLOCmYtNhnedwT8I63LT6myHs0JHZ5edo2gVtQZKz-xBUyk_hwu2Wx7z7rBnssZXVHSpKP9f5phaGpPxI&loadFrom=DocumentDeeplink&ts=1280.9)):

Now, I would say that the whole journey over the last 15 to 20 years was very exciting. I think what I'd like the audience to have as a take home message really is that we need to think academically when we look at patients with COPD that present to us with persistent symptoms and or recurrent exacerbations, I think we have to do our homework in this particular subgroup of patients, and then be more specific, provide tailored treatment. On the other hand, we shouldn't forget that the big majority of patients we see in true life clinical practice are stable patients that require appropriate inhaler therapy with appropriate education and training on the inhaler itself.

Richard ([17:36](https://www.rev.com/transcript-editor/Edit?token=JWNfyZ0_EcqTTkE9Lk-ii814ZE10SZaJhscaXZspQJkFOtdNeNoIghsvXKYpw9XAPZquXkaGdXHkUIxSyr5cJfYz0M4&loadFrom=DocumentDeeplink&ts=1322.98)):

In a moment I'm going to move on and talk about a new and important paper entitled ‘Regular Sustained Release Morphine for Chronic Breathlessness, a Multi-centre, Double-blind, Randomised Controlled Trial’. But first I must thank you, professor Arschang Valipour for coming and joining us today and for unpacking a complicated thing and making it really nice and simple. Arschang, thank you very much.

Arschang Valipour ([17:57](https://www.rev.com/transcript-editor/Edit?token=kom0L2JKl2BnJzV1k6MFbYhSRS6MsAiyGXnOQpigE-UnySR7KBm4C2e1pYwkBkvC-92aG5s-LSWQXsXuGiYG0BsMgwQ&loadFrom=DocumentDeeplink&ts=1345.63)):

It was my pleasure. Thank you very much, Richard.

Richard ([18:00](https://www.rev.com/transcript-editor/Edit?token=JbkvZ0xsKmXhFA13ENLSA_c1QPR3_om0Lg-eG4hD795kzb9nuDtRmDPn9Z8mYLFkLegmJPal0Kh8BTvX5BQdCCFN9MI&loadFrom=DocumentDeeplink&ts=25.54)):

In the last section of this podcast, I'm going to present to you a hot topic that is currently trending on social media which I think is really important, particularly in the winter, which is about how COPD patients are staying warm. Before I do that, I want to tell you all about a paper which I think is really important. It was published in Thorax in 2020, Edition 75, page 50 to 56. It's entitled, ‘Regular Sustained Release Morphine for Chronic Breathlessness, a Multi-centre Double-blind Randomised Control Trial.’ This was published by David Currow, on behalf of the Australian National Palliative Care Clinical Studies Collaborative. They asked the question, does sustained release morphine reduce breathlessness in people who have chronic disease?

Richard ([18:43](https://www.rev.com/transcript-editor/Edit?token=v-A9Go-rxIi7useMH5XLN0fgrwGDW2U8NYKU1bnrBZD9I4ApGDNcGa5SRUUtE0kmhbGwibYYtJ84pxRqQGJogGCMDVY&loadFrom=DocumentDeeplink&ts=248.69)):

We have evidence that morphine does relieve breathlessness in people with respiratory disease. They wanted to do it in a very rigorous way, so they looked at 284 patients and gave them 20 milligrams of morphine in a sustained relief manner versus placebo. Their outcomes were visual analogue score, breathlessness scores, as well as fatigue and quality of life scores. The patients could also use PRN short acting morphine to relieve breathlessness, and this was recorded as well. So, what did they find? They found no difference in the primary and secondary end points. The use of the short acting morphine was less in the people who were receiving the sustained release morphine, as you might have expected, so perhaps there was a little bit of less breathlessness but overall this study was negative.

Richard ([19:27](https://www.rev.com/transcript-editor/Edit?token=sYFI_tnMFWZUHau730yAlTfKpB0y6XROWyTSNBpibm7Bwq-8SONuxwxYVqODIGB45AQn0bAu0TZqSmCM3CF7gFpkNy4&loadFrom=DocumentDeeplink&ts=294.23)):

Why was it negative? Well, they were mixing up different patients, patients with respiratory disease and cardiovascular disease. This was also a relatively short study it may be only seven days. They also had to change their screening criteria. They screened over 1,100 patients to receive the 284 people into the study in finality. What did they do? They looked at people initially with a modified Medical Research Council breathlessness score of three or more but reduced this down to two. The patients they allowed in with less breathlessness maybe did not have enough breathlessness to therefore see any response to the oral sustained release morphine. So, what am I going to do? I'm still going to use sustained release and also short acting morphine in my end-stage COPD patients to help them with breathlessness because there's Cochrane reviews and other studies to support it, but I'm going to keep an eye on this because this is clearly important. What I'm pleased to say though, there were no significant adverse safety signals in this study.

Richard ([20:31](https://www.rev.com/transcript-editor/Edit?token=OOV90wad8qw0S-9PUkeg22wXXc0-YOTq8HFAf7_0ZlO6FVsxu53nGTVfPB7zUhsO_ADpA5wptY7C6kCBshj-ZywpBns&loadFrom=DocumentDeeplink&ts=73.13)):

So, what's been going on in the world of social media around COPD recently. Well, you may have noticed that it's winter and there's a little bit of snow around and it's cold some days. So, what should patients with COPD be doing and what are they saying? Well, they've hatched onto this keep warm, keep well this winter. We know that when the temperature drops outside below five degrees, there is a significant increase in exacerbation rate of COPD and admission rate for COPD. And if people keep their houses at 18 degrees C or above, then this risk is significantly reduced. There is a huge Twitter campaigns now, keep warm, keep safe, stay well this winter hashtag. Facebook campaigns again on keep warm and be safe or keep warm and keep well. All of these things can be searched for and are being driven by patients and by public health to actually keep people warm this winter and stop exacerbations.

Richard ([21:25](https://www.rev.com/transcript-editor/Edit?token=5sRMswe2D8s6oAIwxNV0RAVkW6wqZnjFZKX1gC1VIzcf52w_NAZh0YUr1vcbwlPbLypzdgDQkoX4Rk-E8yQNGeyjqmQ&loadFrom=DocumentDeeplink&ts=125.37)):

World COPD could also certainly pick this up and I'd be really keen for them to actually drive this process forward. We also know that because of COVID, people are not going outside, and people should be encouraged to go outside, keep active, but also wrap up warm and above all, keep their houses warm above 18 degrees centigrade. So, this is something that your patients may come to talk to you about and you need to be aware of and giving them the safe and important messages, which can benefit their lungs and reduce risk of exacerbations.

Richard ([21:52](https://www.rev.com/transcript-editor/Edit?token=0QISH1UeOEfEKTuPlVgViN5AVYBwTzVr8sIQ7ZSaE7pWxwpGn6Qj8X6pvG2Oj0G0dgvSvnexyZncFYGtvE_yHCMpxTo&loadFrom=DocumentDeeplink&ts=84.53)):

Thank you for joining me today for the Medical Insider COPD podcast. I hope you've enjoyed it as much as I've enjoyed bringing it to you. And thanks again to my main speaker, Professor Arschang Valipour from Vienna. Look out for the next edition of Medical Insider COPD podcast, bringing new information directly to you, making a difference for our patients.