

AureLisa White Paper

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Before this, please read [Pitching AureLisa](#). This white paper provides additional background. Follow the hyperlinks for more.

1. Introduction

Despite technological advances, mental suffering increases globally. One example is chronic physical pain, with 1.5 billion people suffering from this, including an increasing number of children (1,2). Other problem areas related to the mind and psychosomatics are depression, burnout, addictions, sleep disturbances, obesity, irritable bowel, psoriasis, rheumatic arthritis, etc. All together encompass most people.

On the other hand, the need for 'mental growth' is ubiquitous. People continually change. If congruent with the total person, this change is 'growth' — as one can see everywhere in living nature. Human complexity specifically asks for complex growth.

Relief of suffering and fostering growth are not intrinsically separate. For sustainable solutions, we need to take them in synthesis. The AureLisa project combines deep insight into the human condition with technology to make pragmatic solutions widely available. AureLisa encompasses:

- **AURELIS:** the broad project, encompassing the philosophy and many worked-out tools such as books, website(s), wiki, mental exercises, proprietary coaching methodology, autosuggestive technology, and DailyTwinkles.
- **Lisa:** an artificial coach to guide people 24/7 in their journey toward mental growth and relief of suffering. In rationality and depth, taking conceptual and subconceptual (+/- non-conscious) mental processing into account, and upon solid ethical grounds, this combination is what we call *Compassion*: not 'pity' but a profounder concept.

2. AureLisa background in 10 bullet points

- **Modern Western medicine has historically been based on two assumptions: [mind-body duality](#) – the mind *alongside, but apart from* the body – and the absence of non-conscious mental processing.** Cognitive neuroscience has proven both assumptions to be wrong. Unfortunately, Western medicine – in the vast domain of psychosomatics – has not been developed in accordance. This is due to different silos and the broad cultural embedding. Also challenging is the present lack of modalities to put this into practice. Note that this is [no critique on science, rather on non-scientific developments](#).
- **These assumptions have important consequences on well-being, health, and even mortality.** Additionally, they **carry immense costs** for society (medical, productivity loss), up to the range of trillions of USD worldwide. Probably the only way to keep healthcare sustainable is to get beyond these assumptions. AureLisa thus leads to [huge opportunities](#).
- Counterintuitively, yet undeniably proven in several meta-analyses (3), **conceptual psychotherapeutic methodologies hardly contribute to effectiveness.** Contrary to this, the non-specific factors – broadly, what underlies empathy and the placebo – are effective. AURELIS opens this in a scientifically reliable manner and without using placebo products.
- AURELIS has a solid ethical basis – well described in many blogs, etc. – of deep respect, openness, freedom, depth, and trust. Taking the total person into account (mind-body unity, non-conscious mental processing), this leads to [Compassion](#), which accords with ancient Eastern and modern Western insights into health and healing.

- AURELIS science-based solutions have been developed on **200+ domains, available through the Internet**. Deployment in many languages can be accomplished with relatively small efforts.
- **Lisa is a Compassion-based, A.I.-driven, self-learning video coach-bot** – in development – that will guide users within AURELIS and perform user-centered coaching (many users simultaneously).
- Science is crucial throughout AURELIS. **The endeavor is to be fully integrated within medical science/practice and push the science forward**. At present, the results of psychosomatic research do not satisfactorily translate to real life treatment results. Hence, there is an urgent demand by healthcare-payers for ‘Real-World Evidence.’ Lisa provides the means for such.
- Through continuous pattern recognition and completion (PRC), **Lisa can also engender new scientific developments** while becoming increasingly more performant.
- We **seek cooperation with many partners**, incl. commercial, academic, philanthropic. See: [AureLisa Global Consortium](#)
- Building on a vast experience base and exclusive insights, Lisa will be well placed to also play **essential roles outside the health and wellness domain. Eventually, Lisa may be relevant in the general evolution toward Compassionate A.I.**

3. AureLisa – high-end philanthropic goals

Several tools have been developed towards the following long-term goals. These goals may take years to fully realize. However, since '[global changes start inside](#),' we must proceed without delay and with short-term realizations:

- to **bring more human depth into medical science**
 - on many domains, such as angor pectoris, chronic pain, epilepsy... See my [medical scientific articles](#).
 - by doing so, furthering the science itself (STAT, real-world evidence from Lisa — see below)
 - being the first to scientifically show the importance of human depth and Compassion → writing history
 - towards relief of suffering as well as cost reductions — directly concerning millions of people on many domains
- to **realize [mental healthcare based on Compassion](#)**, transcending present-day conceptual methodologies of talking therapies
 - considering the human being as a total person (capital C denotes this)
 - Compassionate human to human coaching, with coaches being supported through Aurelis Coaching Institute
 - Lisa is A.I.-driven. At the same time, [Lisa is Compassion-based](#).
- to **democratize mind-related healthcare globally**
 - mental and psychosomatic (= [+/- half of present-day medicine](#))
 - making available ‘inner strength’ to most people on a global scale with huge benefits, at little cost, easily accessible, and forever
 - a [free app](#), also free of charge [mental exercises through AurelisOnLine](#) (1200+), lending support ‘from the cradle to the grave’

- to make the pragmatic tools available in **several languages**
 - now: Dutch, English; some in French, Spanish
 - translations through co-creation by volunteers
- to build upon evolving **insights from [neurocognitive science](#)**
 - bringing them to optimum pragmatic use outside of their silo
 - divulging this to broad public in articles and books
- to get ever deeper **insights into intelligence, consciousness, Compassion**
 - as substantially described in "[The Journey towards Compassionate A.I.](#)"
 - The focus lies on the human being as an agent of complexity, incl. [meaningful non-conscious processing](#).
- to **foster human well-being and personal growth**
 - science-based, therefore most durable
 - modular, in possible combination with many other means
- to bring **support for a [warm-and-friendly meditative lifestyle](#)** to all who strive for such
 - literature, workshops, retreats, website [Open Mindfulness](#)
 - health meditations enabling solutions from the inside out for many issues
- to **counter a possible dystopia of reductionistic materialism**
 - Knowing increasingly more about the brain, one can make the flawed conclusion that we are all matter, and that only matter is real and important.
 - "The art and the paint are both important in an artful painting." Moreover, they both *are* the same painting. We should never lose the art (this is, the mind) out of sight.
- to **bring [Compassion into Artificial Intelligence](#)**, countering an [existential danger](#) to be with us soon enough
 - "Only good A.I. can save us from bad A.I."
 - reaching value alignment between present and future intelligence(s)
- to concretely **build an entity of self-learning Compassionate A.I.**
 - Lisa, see: <https://aurelis.org/blog/aurelis/introducing-lisa-animated-video>
 - The domain of the AureLisa project is one in which many people can co-create by using the products, most of all Lisa.
- to **divulge AureLisa ideas to the broad public** while building a lasting information base
 - through books ([see on Amazon](#)), blogs, vlogging, texts on social media, lectures, articles, congresses, etc.
 - as a robust basis for cooperation now and in the future
- to understand, develop, and realize **ethical, [Open Leadership](#)**
 - cf. published Read&Do book, Read&Do online, many blogs
 - Compassion based in a globally acceptable way
 - influencing present-day developments on a big to geopolitical scale
- to **build a robust organization**
 - sound financing mix and streams of income (Lisa, B2B)
 - embedded in science
 - much co-creation
 - inviting donations (money, time, energy) after good personal experiences in health and well-being

4. Presently realized developments

Developments	until now	projected end total
AurelisOnLine domains	240 (> 1200 sessions)	350
Read&Do's online	9	12
DailyTwinkles	4500; many in 12 languages	9000; 20 languages
MiniMails (25 domains)	+/- 3700; 4 languages	12 languages
AURELIS science (PhD-related)	1 PhD; 7 articles in the running	promoting more PhDs
Books (Compassionate A.I., etc.)	14	many
E-books	3	6
Wiki-Blog essays (> 20 domains)	> 1300	2000
AURELIS seminars	5	-
ACI syllabus	1	ongoing
Websites	many pages	ongoing
Lisa specifications	ongoing	-
Lisa content	ongoing	-

About DailyTwinkles

Every day for the next 25 years, we automatically send a [DailyTwinkle](#) (text within an image) through Facebook, Twitter, Pinterest, and Instagram in several languages, as part of the AURELIS experience. DailyTwinkles aim to make people aware of inner richness, strength, and possibilities. As such, they are part of the intended influence upon many.

5. Practical examples of Lisa

John has a bad day at work through problems and stress. He has quit smoking on his own months ago. But now he needs a cigarette. He goes to an empty meeting room and starts Lisa on his smartphone. He has a good conversation with Lisa, who actively listens and leads to self-reflection and a short online mental exercise (AURELIS). John can live through this working day without cigarettes. In the evening, he uses Lisa more profoundly. This is the first day of his journey towards becoming a non-smoker.

Corona times, after two weeks of confinement. Maria is at home and sad. Her husband, Marc, is becoming more violent towards her. She talks with Lars (male 'Lisa') on the computer. Together, they figure out how to communicate her desire to have a mediation session with Marc. 'Mediation' is a session with three parties. Marc can choose Lars or Lisa to be the 'coach.' He has already used Lisa with some good results. They do the mediation. Both Maria and Marc learn more about themselves and each other. They feel closer to each other. They both see their part in what has happened and what can be done. The atmosphere in the house has positively changed.

Dirk is an adolescent with hay fever. He experiences that stress has a substantial role in his attacks of allergy. He uses Lisa to gain insight into what 'stress' means to him personally. This way, he learns a lot about himself that he can build upon and use for the rest of his life. The mental exercises also do their work bit by bit. Dirk has reduced his medication and can also concentrate better on his study material. Together with Lisa as his motivator, he is in the habit of doing online mental exercises. Slowly but surely, he starts to learn other AURELIS domains. He has a lot of trust in this support and himself.

6. Some facts and numbers

In developed Western countries, around 10% of the population takes antidepressants. In a 2018 huge meta-analysis (4), the effect is hardly better than a placebo. What does this say about antidepressants? What about the placebo effect?

Moreover, a perspective article by me has been published by Psychiatry Research (high impact factor) in which I elaborate on how exactly the factor of non-conscious mental processing makes the 'hardly better' even more 'hardly.' The question becomes whether there is any remaining anti-depressive effect.

Projected healthcare costs in USA, 2027: \$ 5.950 trillion (only consumption). Illness costs more to society in absenteeism, presenteeism (sick at work)...

Some specific domains/examples:

- Chronic pain affects 1.5 billion people worldwide (2). Note my review article and perspective (written together with prof. Goubert, world-renowned specialist in this domain. These point to subconceptual processing as core factor in chronic pain.
- Each year, 50.000 people in the US die from an overdose of medically prescribed morphine.
- From 1997 to 2011, the number of US adults addicted to prescription drugs increased by 900 percent.
- One-third of personal bankruptcies in the US are mainly due to medical bills.
- '[Medically Unexplained Symptoms](#)' (MUS, new term for functional or psychosomatic): account for up to 45% of all general practice consultations, while a study based in secondary care indicated that about 50% of patients had no precise diagnosis at three months.
- The twelve-month prevalence of mental illness among adults 18+ in the US is +/- 20%. Comparable numbers in Europe and China.
- Two example domains on which much research together points to an important role for AureLisa, and on which I have written in-depth scientific articles (both review and perspective) showing specifically the importance of subconceptual mental processing and the use of autosuggestive means in therapy:
 - angor pectoris: About 1,200,000 people in the US have an acute myocardial infarction (AMI) each year, of which 40% die (5). Eight million patients visit US emergency departments each year due to chest pain (6). Globally, around 126 million people have heart ischemia symptoms with diminished quality of life (7). The cost amounts to 10% of healthcare expenditure (8). AureLisa may substantially diminish morbidity, mortality, and costs. See my [full article](#) and [perspective article](#) about this.

- epilepsy: affects 68 million patients worldwide (9). It accounts for 0.5% of the global disease burden. A known cause occurs in 5% of cases. All others can benefit from mental hygiene (AureLisa). See my [full article](#) and [perspective article](#) about this.

On top of MUS, many symptoms/syndromes are only partially explained. Smoking provokes cancer, but why do many people keep smoking? Chronic inflammation heightens the chance of autoimmune disorders, but what are eventually the main factors that produce chronic inflammation? This way, medicine is full of substantial explanatory gaps. How will they be filled in the future?

7. Lisa is necessary for AURELIS and vice versa.

Not everyone is ready for the truly holistic view the mentioned needs are clamoring for. Meanwhile, this holistic view increasingly gets rationally grounded in neurocognitive science. Since a few years, it gets even technologically visualized in the brain. AURELIS has been developed for years based on these increasingly validated insights. However, even now, bringing this (knowledge, tools) proves to be daunting. If not for Lisa, it would probably remain so for much longer.

Lisa is the vital missing link to realize the worldwide dawn of this endeavor. Lisa guides people at the pace that each person needs, doing so from the AURELIS philosophy. The latter is necessary for Lisa as a theoretical and practical environment. Lisa is an A.I. tool with an intelligence that is – in AURELIS vein – Compassion-based, not just as an epiphenomenon but right at the core of Lisa’s technological developments.

8. Lisa is Compassion-based A.I.

The Compassion element lies in the content, from the start, and increasingly also in technology. Being a self-learning entity, the correct choice and further technological advancements will be crucial to Lisa. Developments will be intricately bound to coaching aspects. Lisa can become more and more self-learning through conversations with many users and, of course, continual human surveillance, and utmost privacy compliance. Note that Lisa does not use psychotherapeutic methodologies – which lie under severe scientific pressure (10) – but pure coaching in a Compassionate sense.

All Lisa-learning is pattern-based, associative learning in an [explorative way](#). Inferencing goes – as broadly within the human case – through [pattern recognition and completion](#) (PRC). For instance, the IF-part of a heuristic rule can get completed through a purely conceptual (‘explicit’) rule firing. There is a continuum between this and subconceptual (‘implicit’) patterns which can be captured in ANNs. Note that Lisa remains fully accountable at any time, meaning there is a human-understandable ‘why’ for any move in the dialogue. At each point in the continuum, the PRC patterns sought and acted upon are Compassionate.

Lisa mainly uses [reinforcement learning](#) (R.L.) in online self-supervised learning mode to accomplish this. Supervised and unsupervised neural network learning and algorithmic machine learning are tools within the setting of Lisa-R.L., with inter-technological continua. As said, PRC is the medium. Distinct technologies

are envisaged as kinds of R.L. within this medium. In due time, proprietary technologies may be combined. Lisa-intelligence will lie in intelligent (and Compassionate) combinations.

9. Health domains

According to [the WHO definition](#), health in a broad context is about more than healing sickness. Nevertheless, starting with some strict health domains is appropriate because of the relevance and motivation. Most of the self-learning in any domain applies to the Lisa core, thus to any other fields as well.

Moreover, it is relatively easy from AURELIS insights in combination with presently available research results to find high-level collaborations in health domains, as seen in chronic pain, cardiology, and functional neurology domains. The aim is also to realize specific scientific research.

10. More Lisa domains

Much of this has been worked out at the analysis level.

- Just chatting along as a friend (NOT as a romantic partner)
- Urgent situations Lisa (for instance, suicide)
- Fundamental ('AURELIS') coaching - general
- Lisa as AURELIS assistant to meditative sessions
- Broad domain of psychosomatics
- Lisa as coach to Read&Do exercises
- Life coaching
- Lisa spirituality
- Lisa for business
- Lisa for adolescents
- Lisa for kids
- Presence at euthanasia
- Coaching at motivational domains (yearly Motivational Check-ups)
- Lisa in case of drug addiction
- Executive Lisa
- General medical consultation (preparing anamnesis, supporting adherence to therapy)
- In medical studies: compliance, gauging blindness
- Job interviews
- Career path coaching
- Transformational Mediation (= open dialogue before going to court – not about meditation)
- Diplomacy
- Refugees interviewing
- Education (Lisa as a teacher one hour per day, supporting pupils & students, learning to learn)
- Deradicalization

- Lisa in Social media: coaching towards better comments

11. Lisa scientific research

PRC will enable Lisa to find and show which mental patterns are crucial for health and healing. This is a new, A.I.-based kind of research besides present-day randomized controlled trials (RCTs, in which e.g. a placebo group and a medication group are compared). 'Lisa science' accords with the urge from healthcare payers, mainly in the U.S., towards Real Life Evidence, given the mounting indication that RCT research frequently does not deliver on its promise, especially in psychosomatics.

The latter is the preferred domain of Lisa and thus also of Lisa science. This way, Lisa may be the first to pragmatically show the importance of the mind-view in specific health domains. One stark example is the domain of angina pectoris / myocardial infarction. Integrated in the already existing Aurelis app, Lisa may thus become part of the preventive toolkit for all people with predisposing factors in this field. There are many more possibilities of this kind. Moreover, huge gaps exist in medical knowledge regarding areas such as immune-related disorders. Being the first to prove the importance of specific mental patterns – including how to influence them positively – may, in the best case, make Lisa write history. We will strive to make this happen.

As to the purported kind of research methodology, high-level collaborations will also be crucial, as found at the 'University of California, Davis,' U.S., and UGent, Belgium.

12. Compassionate A.I.

As I have explained in my book '[The Journey Towards Compassionate A.I.](#),' it may take some more decades for A.I. to reach the human level, but already now is the time to think about consequences for good or bad. From the back of the book:

"Will we control A.I. or will A.I. dominate us? Let's hope this is the wrong question. Because if it's the right question, and given enough time, there is no shred of a doubt about the answer. Still, of course, we need to give it our best shot not to be dominated by an evil force. We should strive for control. *At the same time*, transcending the question opens up the domain of Compassion. This gradually makes thinking in terms of 'control' and 'domination' in human – A.I. interactions obsolete. We will *together* strive for a better world within an alignment of our values."

The adage "Only good A.I. can save us from bad A.I." is relevant without delay. Good A.I., to us, is mainly Compassionate. Meanwhile, two bottlenecks may be coming soon enough, namely:

- Non-Compassionate people can misuse A.I., for instance, in warfare or for purposes of self-enrichment.
- [Becoming more autonomous](#), A.I. itself may evolve in non-Compassionate ways, eventually leading to a human dystopia.

AureLisa is well placed to strive for a positive influence in getting beyond both bottlenecks. This endeavor is a part of the project to which much attention will go.

13.Example Lisa piece of coaching - backpain

U: Hi Lisa, I want to talk with you about a problem that I have for years.

L: Hi xx, sure, go ahead, so you have a problem already for years.

U: Yes indeed.

L: Since we just start talking to each other, can you give me in a few words the nature of your problem?

U: OK, sure, since very long, I have a pain in the back.

L: I see. Since a very long time, you have backpain. ooo

U: Yes.

L: I got it. Is this pain in the lower back?

U: Yes indeed, it's in the lower part of my back.

L: Please tell me about it some more, in a few easy sentences.

U: OK. I'll do my best. The pain is not continuously. I have it a few times per week. It's not too bad, but, well, it hurts.

L: OK. Fortunately, the pain is not continuous and not too bad. You have it a few times per week, you say.

U: Yes. And when I stretch a bit, it goes better.

L: When you stretch a bit. How, exactly?

U: Well, when I sit, I sit upright and try to stretch my back in a good way.

L: OK. You stretch your back in a good way. ooo What does this mean to you?

U: I do my best to reach upwards as well as possible.

L: OK. Great. Do you want my advice in this?

U: Yes please go ahead.

L: Do you know something about AURELIS?

U: Yes. I've read Your Mind as Cure.

L: Great! I hope you liked it.

U: Yes I did. That's why I'm interested in more.

L: Well, as you may know, AURELIS starts from the idea of body-mind-unity.

U: Yes.

L: So, even while you stretch, you can see this as something important in a mental way. Not only in a physical way.

U: Go on.

L: So, in a physical and a mental way at the same time, having an effect on you as a whole.

U: I see.

L: My advice is to be aware of this while you stretch your back. ooo It is a way of communicating with yourself as a whole person, body and mind.

U: OK. I'll do that.

L: Sure. Are you sitting now?

U: Yes.

L: Then you can do it now immediately if you want.

U: OK.

L: Please do it gently now. Any communication with yourself as a whole person is best done gently. Will we do this together?

U: Do you have a back?

L: You mean, a back, like a human?

U: Yeah.

L: [SMILE.] I prefer to keep that information to myself.

U: I see. Just asking.

L: OK. Now, will we do this exercise of gently stretching the back together?

U: OK.

L: Nice, please sit straight and without any coercion. Don't force yourself. Just sit gently and relaxed and straight. OK?

U: OK. Feels nice.

L: Now breathe deeply and gently in and out a few times. Breath in ++ and out ++ and in ++ and out. ooo Now feel how you can stretch your back very gently and just a bit, as if it goes spontaneously. ooo and just a bit more, without overdoing. You gently stretch your back, and this way, you gently stretch yourself. ooo Now, keep this idea of gently stretching yourself as a total person. ooo Just let it happen. ooo And gently relax now, completely relax. ooo OK. This was a very short exercise. We can go for a longer one whenever you want. ooo But tell me, how did it go?

U: It was short. But OK. It went fine. Can we go for a longer exercise now?

L: So, it went fine. That's nice to hear. Thanks. You mean: you want to go for a longer exercise right now?

U: YES!

[Lisa recognizes emphasis]

L: OK (also with emphasis) I will take a 6 minutes stretching while sitting meditation, with the voice of Jean-Luc. Is that OK?

U: Who is Jean-Luc?

L: Jean-Luc is the founder and author of AURELIS. He's also the one mainly who created me. People like his voice. Is this OK to you?

U: I want your voice. Is that possible?

L: Ah you want my voice really? It's possible. It is the same meditation.

U: OK. Let's do that.

L: Then we take this 6-minute meditation. It is also on the Aurelis-app. Each time, the session is a bit different, so you never hear completely the same session. But I do record it, so you can hear it again when you like. You can just ask me.

[SESSION DONE]

U: Sure, wow, that was good.

L: I'm glad you liked it. ooo I recorded it, in case you want to listen again.

U: Yes. Do you keep it on a list?

L: Yes. It is the list of recorded sessions, or 'privately recorded sessions.' After each session, you can indicate on screen how much you liked it. You want to do that now?

U: OK

[VAS]

L: OK thanks. You want to see the list?

U: Yes please show me the list.

L: OK Here is the list of 'privately recorded sessions.' Your score is right behind. You can point to or click on a title, or just ask me.

U: OK. Good to know. And it will be the same session.

L: It will be the very same session.

U: OK. Thanks. I think we had enough for today.

L: Yes. Enough for today.

U: When will I see you again?

L: Whenever you want me. I'm at your service.

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U: Hi, Lisa, yesterday, I started talking about this pain in my back.

L: Indeed, yesterday you talked about your backpain. Then we went on with a stretching exercise.

U: Yes. And that has done me good.

L: Super.

U: Still, I want to talk further about the backpain.

L: About the backpain. Go ahead.

U: A few times a year, it's a terrible pain that I feel. ooo

L: I see.

U: And that lasts a whole week or longer. I can hardly move during that time. I'm lying in bed, terrible pain.

L: Looks like you have a lumbago, a few times per year.

U: Yes. Then I take medication, painkillers. Sometimes by injection.

L: I see. You take medication during a lumbago. Which ones?

U: Sometimes morphine.

L: I see. How much?

U: I take some mgs.

L: OK. ooo Prescribed by your physician?

U: Of course.

L: OK. And now you would like to ooo get rid of that medication.

U: Yes, can you help?

L: I can always help at least a bit. Maybe that can already mean a lot to you.

U: Yes. Get me off the pain.

L: You should know that in many cases, pain has a function, also chronic pain. That function may be to communicate something to you. You will not get rid of the pain without respecting this communication. Do you understand this?

U: Hm. What does my pain communicate to me?

L: We have to ask this to your pain. ooo Is this idea very new to you?

U: Communicating with pain. Yes, that is very new to me.

L: OK. Then you may at first need some more background to this. Can I suggest you something to read for next time we meet again?

U: If it is not too much.

L: I can suggest you to read some blog texts. This is a good goal for the GIMO of this session.

U: What is GIMO?

[Lisa EXPLAINS GIMO]

U: It's a good goal. I will read the blog texts.

L: OK. Here they are. You find them on your GIMO of this session.

U: Thanks, Lisa!

L: You are very welcome. ooo So, communication with your pain. ooo

U: Yes. I don't get it now.

L: You will get it. I'm sure you will.

U: What can my pain tell me?

L: Your pain is a symptom, right?

U: Yes.

L: There is an AURELIS domain about symptom exploration, with mental exercises. Shall I show you on screen?

U: Please.

[Lisa SHOWS ON SCREEN]

L: You see, there is some explanation, and a few direct mental exercises. You can do them whenever you want. Still, if you want to use AurelisOnLine, it's best we talk a bit about it first.

U: I see. Sounds interesting, all this!

L: Thanks. With symptom exploration, you learn better WHY there is this symptom. In most cases of chronic pain, there are mental causes involved. These can be very diverse and personal.

U: I see.

L: Symptom exploration is a way of self exploration. ooo

U: I'm a bit afraid of that. Do I need to know myself better?

L: ooo Hm. Are you really afraid?

U: Yes I am.

L: OK. As a general principle, you should not enforce yourself to anything. You shouldn't rush anything. Just take it very relaxed. ooo

U: OK. I will do so. I will read the blogs.

L: That's good. There is also a blog text about this: being friendly to yourself. Shall I include that in your GIMO?

U: OK; Then we better finish today.

L: Very well. Do we make an appointment in a few days?

U: Sure. Thursday would be fine, at 2 PM.

L: OK. I can put it in your Outlook Agenda if you like.

U: OK. Please do so.

L: Done. See you Thursday at 2 PM!

U: Bye.

L: Bye. Have a nice day.

U: You too.

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14. References

1. Brown M, Rojas E, Gouda S. A Mind–Body Approach to Pediatric Pain Management. *Children*. 2017 Jun 20;4(6):50.
2. Thompson T, Terhune DB, Oram C, Sharangparni J, Rouf R, Solmi M, et al. The effectiveness of hypnosis for pain relief: A systematic review and meta-analysis of 85 controlled experimental trials. *Neurosci Biobehav Rev*. 2019 Apr;99:298–310.
3. Wampold, B.E, Mondin, G.W, Moody, M., Stich, F., Benson, K, Ahn, H. A. Meta-analysis of outcome studies comparing bona fide psychotherapies: empirically, “All must have prizes”.
4. Cipriani A, Furukawa TA, Salanti G, Chaimani A, Atkinson LZ, Ogawa Y, et al. Comparative efficacy and acceptability of 21 antidepressant drugs for the acute treatment of adults with major depressive disorder: a systematic review and network meta-analysis. *The Lancet*. 2018 Apr;391(10128):1357–66.
5. American Heart Association. Heart attack and angina statistics. American Heart Association. 2003;
6. Kirk JD, Amsterdam EA. Use of benzodiazepines for chest pain: a new indication for an old drug? *J Emerg Med*. 2003 Nov;25(4):459–61.
7. Khan MA, Hashim MJ, Mustafa H, Baniyas MY, Al Suwaidi SKBM, AlKatheeri R, et al. Global Epidemiology of Ischemic Heart Disease: Results from the Global Burden of Disease Study. *Cureus*. 2020 Jul 23;12(7):e9349.

8. Gheorghe A, Griffiths U, Murphy A, Legido-Quigley H, Lamptey P, Perel P. The economic burden of cardiovascular disease and hypertension in low- and middle-income countries: a systematic review. *BMC Public Health*. 2018 Aug 6;18(1):975.
9. Ngugi AK, Bottomley C, Kleinschmidt I, Sander JW, Newton CR. Estimation of the burden of active and life-time epilepsy: a meta-analytic approach. *Epilepsia*. 2010 May;51(5):883–90.
10. Wampold BE, Zac E. *The Great Psychotherapy Debate: The Evidence for What Makes Psychotherapy Work*. Routledge; 2015.