

ARE YOU ONE OF THE MANY WOMEN WHO ARE CONSIDERING A BREAST AUGMENTATION OPERATION, AND ARE STRUGGLING WITH A NUMBER OF UNANSWERED QUESTIONS?

I understand that much of the information and peer opinions found on the web can cause confusion. I have come to the conclusion that offering you the ultimate guide to breast enhancement can help women sort out myths and realities involved with this type of surgery. This guide does not take the place of a one on one consultation and a complete physical evaluation with a qualified plastic surgeon, both of which are essential for appropriate counselling on the type of breast implant (silicone or saline), implant positioning (under or over the pectoral muscle) the type of incision (areola, mammary fold or armpit) as well as the operation method (endoscopic or traditional). No one compares to a certified plastic surgeon withover twenty-five years of experience to help guide you through this important endeavour.



PLASTIC SURGEON Dr Mario F Bernier c.s.p.q., f.r.c.s.(c), f.a.c.s.

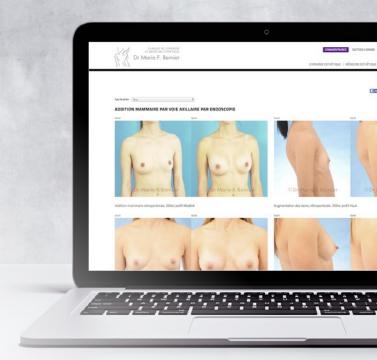
CHOOSING YOUR SURGEON

First of all, be sure you are seeing a certified plastic surgeon. A plastic surgeon is the only qualified specialist possessing the appropriate and extensive training and the knowledge needed for breast augmentation (enhancement) operations. Ten years of medical schooling in universities to which, some surgeons, have added training in aesthetic surgery also known as Fellowship. There are many titles used to identify professional competence. For instance the letters C.S.P.Q confirms the surgeon has successfully passed exams in the field of plastic surgery recognized by Le Collège des Médecins du Québec. The titles F.R.C.S. (c) and F.A.C.S obtained by surgeons having attended the Royal College of Physicians and Surgeons of Canada and the American College of Surgeons confirm the surgeon has reached requirements of the highest standards in the field of plastic surgery in Canada and the United States.



BEFORE AND AFTER PHOTO GALLERIES

BEFORE AND AFTER PHOTO GALLERIES can give you a good idea of the quality of the surgery and confirm that the surgeon's standards of aesthetics and beauty compare to yours. In my opinion natural shaped breast and volume give the best results.



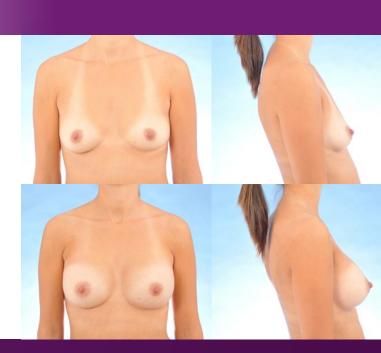
CONSULT OUR PHOTO GALLERIES DRBERNIER.COM/FR/GALERIE-PHOTO

BEWARE OF «X-Y-Z RATING» WEBSITES.

These web sites are quite popular among internet fans, but are they in fact credible? Did you know that surgeons can become members of these sites by paying a monthly fee, in turn allowing them to manage the content? To top it all, these sites are anonymous therefore there is no way to confirm that the comments are from actual patients or competitors.

ASK THE RIGHT QUESTIONS. How many surgeries do you perform each year? How long have you been a plastic surgeon?

In short, see 2 or 3 surgeons before you decide and opt for the one you feel best with...



IS PRICE SHOPPING

THE BEST IDEA?

THE BEST QUESTION IS: WHY DOES PRICE DIFFER FROM ONE PLACE TO ANOTHER?

One needs to verify that the surgeon is a certified member of *L'association des chirurgiens plasticiens du Québec.* Many doctors claim to be experts without having all the credentials. They advertise lower prices to make the surgery attractive to more customers.

THE SURGICAL TECHNIQUE

will also impact the cost of the operation. An endoscopic operation for example, requires state-of-the-art technological equipment and costs related to maintenance and medical supplie.

operating room time is also a key element in pricing. Time required for surgery directly impacts the cost involved. As a perfectionist, I consider that any operation must be perfect the first time. My main concern is my patient and the success of her operation.

THE BEST QUESTION
YOU SHOULD
BE ASKING IS:
WHY DOES PRICE
DIFFER FROM ONE
PLACE TO ANOTHER?

ISPRICE SHOPPING THE BEST IDEA? (NEXT)

THE TYPE OF IMPLANTS will also affect the cost. Cohesive silicone gel implants cost more to manufacture than physiological saline implants.

Another element to consider is where the operation will be performed. The cost of surgery will not be the same if the surgeon operates in a hospital, his private operating room or a specialized clinic. The most important factor is to be sure the operation is performed in a safe and healthy environment with qualified personnel.

It is important to keep in mind that reduced price surgery with possible post-operation complications can become extremely costly in the long run. *Since 2012 all outpatient ambulatory clinics performing surgery must be certified by Accreditation Canada. From now on, all surgery centers must conform to the highest patient medical care standards. With this in mind, you must make sure that the clinic you are about to choose for your operation is certified by *Agrément Canada*. This certification does have a price.

FOREIGN COUNTRY SURGERY: IS THIS A GOOD IDEA?

CUBA, DOMINICAN REPUBLIC, COLUMBIA, CHINA OR INDIA...

It may seem attractive to consider surgery in a foreign country for less money up front. On the other hand, it can be difficult even impossible to validate the level of medical training, professionalism and surgical competence in other countries. Furthermore, the hygiene standards vary from country to country. We often hear about patients who develop complications returning from surgical tourism, such as infection and other post-operative issues. When back in Canada, the patient cannot receive adequate follow-up with her surgeon. What happens with post-operative complications? We often get calls from desperate patients who have no one to turn to for help in treating breast augmentation complications. Those patients are usually referred to the hospital.

PREGNANCY QUESTIONS / ANSWERS

BREAST AUGMENTATION: BEFORE OR AFTER PREGNANCY? Women with smaller breasts (32-34 AA- A or B-) can have breast augmentation surgery before pregnancy without any significant change even after breastfeeding. Breast size (volume) reduction is rare just as is an excess skin (falling breast) for these patients. On the other hand, women with larger natural breasts (36 -C -D) are more at risk of volume variations during and after pregnancy, thus unwanted consequences or excess breast skin. Often these patients may require a breast lifting operation (mastopexy). Pregnancy should only be considered no less than 6 months after breast augmentation surgery.

IS BREASTFEEDING POSSIBLE AFTER BREAST AUGMENTATION SURGERY?

When the implant is positioned under the pectoral muscle, the mammary gland remains functional for breastfeeding.

PREGNANCY

HOW LONG MUST I WAIT AFTER PREGNANCY BEFORE HAVING SURGERY?

Even if many women wish to combine their maternity leave with time off for recuperation after a breast augmentation surgery, it is important to remember we cannot perform surgery while you are breastfeeding. Your breasts need to return to their natural shape and not be modified by pregnancy's hormonal influence. This is why we recommend anywhere between 6 months to one year after breastfeeding. After this period, the surgeon can proceed with a complete physical breast examination in order to determine if you are a better candidate for breast augmentation or simply a breast lift (mastopexy*). When a breast lift operation is required, you must imperatively stop smoking tobacco and/or pot at least 6 months to 1 year before surgery, because the risk of skin necrosis (dead skin) and a poor healing process are more frequent with smokers.

WILL I HAVE STRETCH MARKS ON MY BREASTS AFTER AUGMENTATION SURGERY?

Stretch marks usually appear when breast size increases too rapidly such as at puberty, during pregnancy, important weight gain, and sometimes with breast augmentation. Even if the risk is minimal, stretch marks are generally associated with a patient's age and skin genetics. A young woman (18 to 20) having never been pregnant, who chooses a breast augmentation operation with larger sized implants is more subject to stretch marks than another patient.

*You can do this simple test at home: Place a pencil under your breast at the fold line. If the pencil remains in place a breast lift may be required, with or without breast implants. The same result will occur if, when facing the mirror, your nipples point below the inframammary fold.

PREGNANCY
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WHAT SHOULD I EXPECT

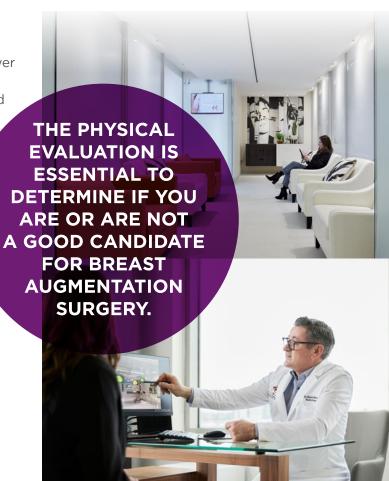
ON MY FIRST APPOINTMENT WITH THE SURGEON?

Once decided who is to be your surgeon, the first contact is usually by phone or e-mail, perhaps with a receptionist or medical assistant. The first impression, the knowledge and attention shown by the personnel are excellent indicators as to the professionalism of the clinic, since these people will be your allies during the entire surgical process, before, during and after. Upon your arrival, you will be given a medical questionnaire, which is needed to help the surgeon evaluate your general state of health. In certain cases, the surgeon may decide because of important health issues that it is not recommended to have this type of surgery, or that you should be operated on in a hospital rather than a clinic.

When breasts are falling, (nipples are lower than the breast fold, or positive result of the pencil test) it is preferable to proceed with a breast lift. A breast augmentation increases the volume of the breast; it does not replace a breast lifting. In some cases, for patients with specific criteria, it is possible to combine a mastopexy with a breast lift at the same time. Usually I prefer to start with the breast lift (mastopexy) and proceed with the breast augmentation one year later. In this manner, chances are increased

of obtaining stable results and less

noticeable scars.



THE CONSULTATION

BREAST IMPLANT FITTING is done using a compression compressive bra, and is one of the most appreciated steps of the consultation. The surgeon will select one or more different implant sizes and models based on specific criteria: breast measurement, thorax volume, quantity of mammary gland, thickness of skin, breast asymmetry, breast ptosis, abnormality of muscular tissue or thoracic cage and, of course, the patient's expectations. This step will give a clear view of what to expect from the breast implant surgery in terms of volume and shape.

3D IMAGING SIMULATION IS NO LONGER AVAILABLE AT THE CLINIC BECAUSE SIMULATED IMAGES AND REAL POST-OP PICTURES WERE TOO DIFFERENT.



WHAT YOU SHOULD KNOW

ABOUT BREAST IMPLANTS

Most implants used in Canada and in the U.S. are supplied by Mentor companies (Johnson & Johnson) or Natrelle^{MD} (Abbvie). Both are well known and have over the years developed great relationships with plastic surgeons. Both manufacturers offer physiologic saline implants and silicone cohesive gel (AKA gummy bear) implant. All breast implants have pros and cons.

Let's have a closer look.







IMPLANTS

Choosing saline or Silicone implants is mainly based on the surgeon's personal experience and convictions. Nonetheless choosing the best one for the patient is more complex than it may seem. Physiological saline implants are not less natural looking than silicone implants. Choosing the right saline implant will give natural looking results.

First of all, let us consider silicone breast implants. Silicone implants were banned from the market in 1992 because of a link between implants and collagen-related diseases called collagenosis: rheumatoid arthrosis, polymyositis, lupus erythematosus, etc. They are once again available since 2006 and are more and more popular among patients. Even though scientific studies have not been able to show a significant relation between silicone implants and these illnesses, one must remember that long-term local complications are more frequent with these implants. Fibrous capsular contracture (hardening of the breast), fibrous capsular calcification (bone development in the scar envelope), appearance of seroma in the long term and silent rupturing are all complications mostly associated with silicone breast implants. Should an implant rupture, silicone gel can spread to the underarms, thorax, kidneys and other organs. Some cases have been reported where silicone gel has migrated to the underarm area and lymph nodes without any signs of implant rupture. These local complications often result in complex and lengthy secondary operations usually more costly than the initial surgery.

IMPLANTS

HIGHLY COHESIVE GEL BREAST IMPLANTS (GUMMY-BEAR) are the most recent addition to the implant market. They are not necessarily better just because they are new. More consistent than silicone gel, they require a longer incision to insert under the breast. These new cohesive gel silicone breast implants (cohesion rate varying between I – II – III) show a lower fibrous capsular contracture rate and silicone gel leakage rate than previous silicone gel implants. Another issue to consider is that the rate of fibrous capsular contracture is much higher in silicone implants compared to the physiological saline breast implants. Long term scientific studies (>20 years) are under way, therefore safety of these new implants will be known only in the future. An increase in folds when fondling the breast has been observed to the previous generation of silicone gel implants has been observed and a magnetic resonance imaging (MRI) is needed to assess any unnoticeable silicone gel leakage.

IMPLANTS

PHYSIOLOGICAL SALINE IMPLANTS remain the most « natural » option. Over the years, progress has been made in terms of envelope-rupture resistance and valve sealing in order to reduce risk of leakage. The external envelope is the same as that of silicone gel, but during surgery, the envelopes are filled with a physiological saline solution. Since implants are filled after inserting under the breast, the incision that is required is only (2.3 cm in the armpit or 4 cm under the breast).

WHAT YOU SHOULD KNOW

SILICONE IMPLANTS

Natural to the touch

Incisions of 4cm

MRI required to assess leakage or rupture

Silicone

Volume increase or reduction impossible

SILICONE COHESIVE GEL IMPLANTS

Firm to the touch

Incisions of 4cm - 5 cm and+

MRI required to assess leakage or rupture

Cohesive silicone (I-II-III)

Volume increase or reduction impossible

SALINE IMPLANTS

Natural when implant is chosen in relation to the patient's appearance

Incisions of 2.3 cm in armpit or 4 cm in the inframammary crease

Rupture is visible and without consequences since saline solution will be eliminated in urine.

Physiological filling (saline solution)

Adjustment is possible to correct breast asymmetry

IN A NUTSHELL OOO CONS

IN HOW MANY YEARS SHOULD MY BREAST IMPLANTS BE REPLACED?

Most women wrongly believe that saline breast implants should be replaced every 10, 15 or 20 years. This is not necessarily tru... Depending on age you were when surgery was first performed, it may be assessed that only one breast implant replacement will be needed. Implant manufacturers consider that the external membrane can thin out over time, and the risk of rupturing can slightly increase. Therefore if a patient had her first implant surgery at 20 years of age, she may be more likely to require a replacement operation 20 years later, as opposed to a patient nearing 40 who may never need to have the implants replaced. If no specific complications arise, there is no need to replace breast implants. The most common reason for replacement surgery over time is because patient wants to increase the volume of their implants. For gel implants it is recommended to change them after 20 years, or when silent leaking is visualized by MRI.

IN A NUTSHELL OOCUM

WHICH IMPLANT STYLE SHOULD I CHOOSE: ROUND OR ANATOMICALLY SHAPED (WATER DROP)?

My preference goes to a round implant as opposed to the anatomy shaped (water drop) for several reasons. Since the shape is round-and completely symmetric, regardless of the patient's positioning, results will always be the same, whether standing or lying down. Because anatomically shaped implants are asymmetric (projection to the base rather than to the upper portion), breasts are not as natural looking when the patient is lying down. Furthermore should the breast implant rotate, the patient risks needing a second operation to reposition the implant. Anatomically shaped implants are always textured implants.



INANUTSHEL **IMPLANTS: SMOOTH OR TEXTURED?** I recommend smooth implants to my patients, because risk of capsular fibrous contracture and development of palpable creasing are much less frequent when opting for these implants. Several medical studies have shown that the rate of capsular fibrous contracture, late seroma and double capsular is definitely higher with textured breast implants. In addition, scientific studies have shown an association between textured breast implants and fibrous capsule cancer (anaplastic large cell lymphoma/ALCL). Of note, a new FDA study (2022) warns of a possible rare form of squamous cell carcinoma (SCC) that may affect patients with chronic inflammation or infection for 15-42 years with smooth or textured saline or silicone (gel) breast implants.

IN A NUTSHELL (J) © © < JUS

CAN TEXTURED IMPLANTS CAUSE CANCER?

Recent scientific studies correlate textured implants with anaplastic large cell lymphoma (ALCL). The incidence of this type of fibrous capsule cancer is 1:2,207 to 1:86,000 patients. It takes 9.75 years after surgery before the cancer develops. Symptoms are usually a large swelling (seroma) of the breast, the appearance of a lump or rash, fever and lymphadenopathy. Diagnosis is made by biopsy of the seroma fluid and cytologic studies with CD-30 positive for large anaplastic T-cells. This type of cancer is usually curative with surgery to remove the scar tissue (total capsulectomy) and removal of the breast implants. However, there is no need to panic if you have this type of breast implant, as it is not indicated to remove them in asymptomatic patients. It is also important to have a regular follow-up with your plastic surgeon and to be attentive to clinical changes in the breasts.

DO BREAST IMPLANTS INCREASE THE RISK OF BREAST CANCER?

Breast cancer represents 25% of all cancers in women. One in 8 women will develop breast cancer during her lifetime. Scientific studies have shown that there is no relationship between breast cancer and breast implants. In the event that a patient with subpectoral breast implants develops breast cancer, the general surgeon will remove the tumor (partial mastectomy) and the implants will usually be preserved. Radiation and chemotherapy will be administered if indicated. I do not recommend breast implant surgery for patients with higher risks (history of mother, sisters...) and/or diagnosed with genetic factors with mutation of BRCA1, BRCA2 or other genes.

BREAST IMPLANTS ILLNESS (BII)

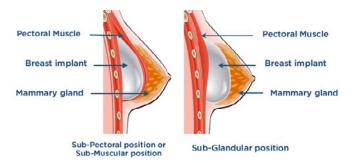
BII is a set of non-specific systemic symptoms described by patient groups on social media. Symptoms vary widely from patient to patient, but may include: muscle and joint pain, weakness, memory or concentration problems, chronic pain, depression, fatigue, hair loss, cold-like symptoms, migraines, rash or skin problems. There is no diagnostic test for BII which makes it very difficult to confirm. It is possible that these symptoms are not related to breast implants. It is important to be evaluated by your family physician first to rule out other inflammatory or autoimmune diseases. The most recent studies show that removal of breast implants can eliminate or reduce symptoms in some patients. Furthermore, there is no significant difference between total and/or en bloc capsulectomy and removal of the breast implants leaving the fibrous capsule in place. This is why this type of surgery (total and/or en bloc capsulectomy) is not necessarily indicated contrary to what is conveyed on the internet.

IN A NUTSHELL OOCUS

BREAST IMPLANT POSITIONING:

BEHIND OR IN FRONT OF PECTORAL MUSCLE?

In most cases I choose to position the implant behind the pectoral muscle (subpectoral). This position is ideal for patients with reduced mammary gland or breast fat, because the pectoral muscle will act as camouflage giving breast a more natural look. Another advantage with this position that it greatly reduces the risk of capsular fibrous contracture. Some surgeons, position the implants in front of the pectoral muscle and more precisely under the pectoral muscle fascia. Personally, I do not recommend this surgery because there is a significant increase in the risk of contracture of the fibrous capsule with calcification.



BREAST OPERATION

WITHOUT SCARS ... IS IT POSSIBLE?

LET'S TALK INCISIONS...

I believe the BEST incision is AXILLARY (armpit). In addition to leaving no scars on the breast, the endoscopic operation (camera) allows for an extremely precise and secure operation. The scar is not more than 2.3 cm in the armpit and is practically invisible one year after surgery. Since the operation is performed with a camera (endoscope), **it is possible to use the same incision for surgery** should another operation be required. Scientific studies show that axillary lymph nodes are not affected by this surgical technique. The risk of infection is extremely low and there is no need for wound fluid drains. Breast spacing is not wider when using this technique - that is simply a myth! (See next point.)





SCARS

PERIAREOLAR INCISION (around colored portion of the nipple) is more invasive since sectioning of the mammary gland is required right up to the pectoral muscle, risking contamination of the breast implant, hence risk of developing an infection or fibrous capsular contracture

THE INFRAMAMMARY INCISION (under the breast) requires a longer incision than the axillary incision (4 cm or more) and is usually quite visible many years after the surgery. Since the scar supports the weight of the breast implant in the healing process, the scar tends to spread. The span rate and wound dehiscence is greater when choosing this incision compared to the axillary incision. In time, the implants will tend to drop a few millimeters and the inframammary scar will migrate slightly upward









WILL MY BREASTS APPEAR WIDER APART OR CLOSER TOGETHER AFTER SURGERY?

Spacing between breasts will be identical to what it was before implant surgery once the implant is in subpectoral position, regardless of the type and area of incision chosen (areola, breast crease or armpit). Breast cleavage is physiological, influenced by the shape and width of the thoracic cage and by natural closeness of the breasts. It would be **WRONG** to believe that after breast augmentation surgery a reduction of spacing between breasts occurs in a subpectoral position, when the surgeon respects the internal pectoral muscle insertion. If breasts are naturally farther apart, even though breast implants may offer more volume and roundness, breasts will not be closer or farther apart after surgery. Much to the contrary - a patient with very close breasts will nonetheless increase the distance between their breasts even with small implants.

In other words, with subpectoral positioning surgery, the pectoral muscle attachment to the ribs is preserved to allow muscular sheltering of the implant and to prevent implant edges from folding. Since the pectoral muscle position is not altered during surgery, regardless of the technique used, **breast spacing will ALWAYS be the same.**

On the other hand, when the breast implant is in a retromammary position (on top of the muscle), spacing between breasts can be reduced. Only very few patients are good candidates for this surgery.



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RECOVERY



BACK TO WORK

Under normal circumstances, an office worker requiring little or light physical effort (secretary, administrative assistant, accountant, school teacher, doctor, lawyer, dentist, dental assistant, hairdresser, esthetician, etc.) can return to work between 5 and 7 days after surgery. For patients who have more demanding jobs (police, ambulance attendants, orderlies, soldiers, manufacturing personnel, massotherapists, physiotherapists, gym instructors, etc.) it is recommended to wait 10 to 14 days.



BABIES

If you have recently given birth, you can cuddle your toddler without fear on the same day. Patients should refrain from lifting children weighing over 40 lbs, since you will need to get help for 5 to 6 days following surgery.



FITNESS TRAINING

There are no objections to walking and tending to your regular activities as soon as you feel up to it, although for sports or physical activities requiring strenuous cardiovascular or muscular efforts, you will need to be patient and wait for at least one month following surgery.

RECOVERY



SWIMMING AND TRAVELING

Even considering that I do take all necessary precautions during surgery to reduce risks of thrombophlebitis, or pulmonary embolism, by using among other methods, intermittent compression stockings, I highly recommend refraining from air travel for at least one month before and after breast augmentation surgery. To reduce risks of infection, I suggest refraining from all types of swimming one month after surgery, including in hot tubs, public pools, saunas, lakes, rivers and oceans.



DO I NEED TO CHANGE MY ENTIRE WARDROBE AFTER SURGERY?

For some, the answer is unfortunately no. On the other hand you will need to consider purchasing new bathing suits and bras. I supply one bra that you will need to wear for 6 weeks following surgery; this is to favor prompt and efficient healing. Once this time elapsed, you can purchase new undergarments. The only restrictions are base-padded bras and sport support compressive types, in the long term, these garments could shift the breast implants.

CONTRAINDICATIONS FOR BREAST IMPLANTS

For patients with the medical conditions listed below, I recommend that they do not undergo the surgery or proceed in a hospital setting.

- Personal history of thrombophlebitis or pulmonary embolism
- Taking anticoagulant medication (Coumadin, Eliquis, Pradaxa, Xarelto, Lixiana or others)
- Daily use of Aspirin (prevention)
- Family history of breast cancer with BRCA1, BRCA2 or other gene mutation
- · Patients under investigation or treatments for any type of cancer
- Patients who do not comply with the recommendations of the Quebec breast cancer screening program for mammography and breast ultrasound
- Cardiac surgery (bypass, stent, valve replacement, pacemaker)
- History of heart attack
- · History of stroke
- Organ transplant surgery
- Autoimmune diseases (Crohn's, ulcerative colitis) with immunosuppressive medication (Remicade, Humira, Methotrexate, Purinthol or others)
- Diseases of the blood coagulation system (Factor V Leiden, Hemophilia A and B, Thrombocytopenia, Von Willebrand disease, Factor XIII deficiency, Fibrinogen deficiency and others)
- · Infections of any kind
- Any other hereditary diseases that may increase risks and complications (to be discussed with your family doctor or Dr. Bernier)

For patients with a history of collagen disease (collagenosis) such as rheumatoid arthritis, scleroderma, fibromyalgia or others, it is preferable to discuss it with your doctor or rheumatologist.