

Jade Woman herbals Treatment of functional Female infertility

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Functional female infertility is that caused by a problem in the function of the ovaries, fallopian tubes, endometrium, cervix, pituitary, hypothalamus or other systems in the body such as the immune system or other glands such as the thyroid. The dysfunction may manifest in hormonal imbalances, irregular ovulation, poor egg quality (other than that attributed to age), inadequate corpus luteum activity, faulty fertilization, defective embryo transport, failed or ineffective implantation and placental development, any combination of the above or other aspects of female fertility about which we as yet know little or nothing.

We shall include age related infertility in our discussions here, in which the aging of the ovaries means there is less response to stimulation by pituitary hormones and poorer quality eggs in terms of their DNA integrity and also their metabolism and energy production.

Infertility related to polycystic ovarian syndrome or endometriosis and their treatment will be discussed elsewhere. There is no reliable effective herbal treatment for structural blockage of the fallopian tubes. Functional blockages of the tubes, like muscular spasms, can be addressed by Jade Moon Phase treatments.

Treatment of functional female infertility pays attention to each of the various phases of the menstrual cycle maximizing function of reproductive organs including the ovaries and other glands. We do this by considering the physiological processes of each phase as viewed from both biomedical and traditional Chinese medicine perspectives and applying medicinals which promote or adjust these.

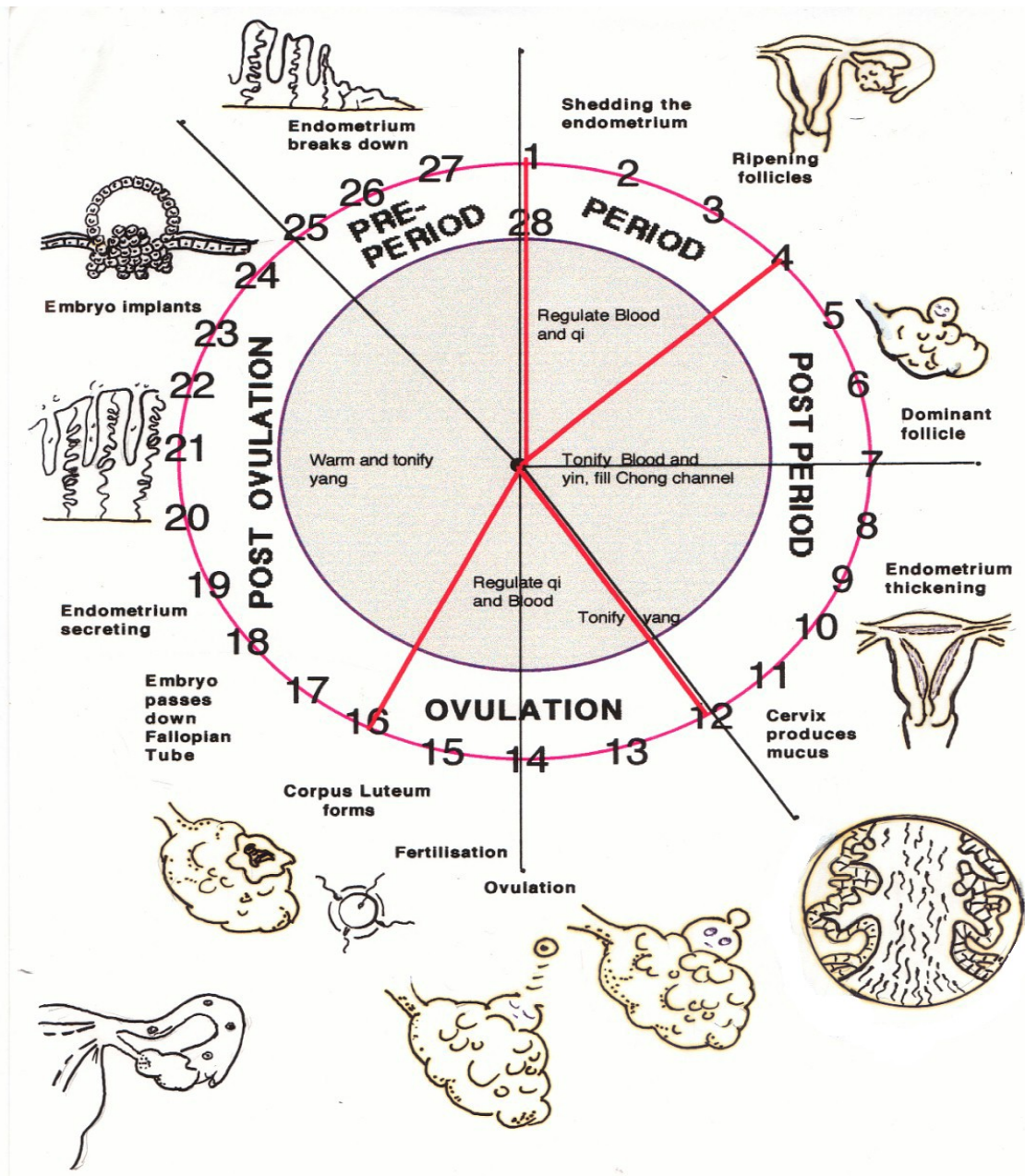


Diagram reprinted from “The Treatment of Infertility with Chinese Medicine” by Jane Lyttleton and published by Churchill Livingstone 2004 1st edition, 2012 2nd edition.

The first quadrant, the period, is the time when the lining of the uterus is being shed. Jade Moon Phase 1 formulas will be taken during this phase. Following the period, the post period sector, is the time when the follicles develop in the ovary and the uterine lining is replaced. Phase 2 formulas will be applicable during this time. The third phase, ovulation

is a busy phase during which we need to be aware of many different physiological processes, including maturation and release of an egg, transport in the fallopian tubes and the development of a corpus luteum on the ovary. Our Phase 3 formula takes all of these into account. Finally we apply the Phase 4 formula in the last segment of the cycle, from several days after ovulation up until the period or a pregnancy test. This formula aids the process of implantation if there has been a conception.

When constructing formulas to be taken at different times of the menstrual cycle not only must we be aware of the biological process taking place but also the ebb and flow of yin and yang. This is important at the pivotal times of the cycle for example when yin becomes yang and ovulation occurs.

Jade Moon Phase 1 formulas

As part of the overall treatment plan for functional infertility Phase 1 formulas are to be taken from Day 1 – 3 or 4 of the menstrual cycle ie as soon as the period begins and continued for a few days.

This stage of treatment is all about the uterine lining and the blood. There are two versions of the Phase 1 formula, depending on the degree with which we need to move the blood. We will use pain as the main indicator for deciding this, however you can also use other indicators such as colour and quality of the menstrual flow.

During this phase we are keen to encourage the natural movement in the Chong and Ren channels, the flushing of the uterus, and by so doing create a smooth base for a well constructed endometrium to enable implantation of any embryos later in the cycle. We will know we have achieved this when the menstrual flow arrives and finishes cleanly without dark spotting before or after the period, the menstrual flow is a bright fresh colour, with no clots, not too thin, not too thick. It flows smoothly without stopping and starting, and with little or no discomfort.

The idea behind the treatment we apply in phase 1 of the menstrual cycle is the most straight forward of any of our different phases, but it is important to remember that factors operating at this time of the cycle can have significant influence on events later on when an embryo is trying to implant. Encouraging orderly removal and rebuilding of the uterine lining is critically important to clear any subtle (or not so subtle) stagnation which might interfere with the development of the endometrium, its glands and implantation sites. Reproductive specialists have long remarked on the improvement in fertility they have observed in some of their patients after a D and C procedure (dilation and curettage) during which part of the lining of the uterus is removed. Here we aim to achieve something similar in a gentle way.

1 Jade Moon

Phase 1, Regulate

Promote menses, no pain

Dang gui (Angelicae sinensis Radix)
Bai Shao (Paeoniae Radix alba)
Chuan xiong (Chuanxiong Rhizoma)
Hong hua (Carthami Flos)
Tao Ren (Persicae semen)
Yi mu cao (Leonuri Herba)
Xiang fu (Cyperi Rhizoma)
Ji xue teng (Spatholobi Caulis)
Dan shen (Salviae miltiorrhizae Radix)
(Sheng) shan zha (Crataegi Fructus)
Chuan Niu Xi (Cyathulae radix)

Focus of treatment

- Regulate blood and qi (to flush out the endometrium smoothly)
- Replenish blood (to replace loss of blood stores)

Construction and therapeutic strategy of the formula

The basis of these phase 1 formulas particularly **Jade Moon Phase 1-Regulate**, is the well known formula Tao Hong Si Wu wan (4 Substance Formula with Saffron and Peach kernel).

If this phase is all about the blood where better to start than with this famous formula which is constructed by adding to blood regulating herbs to Si Wu Tang or 4 Substance formula. This formula contains 4 major blood tonic herbs and is the basis of all blood

It is recognized as the most important formula for gynecological disorders as it is designed to supplement and harmonize blood. It is the ideal basis for our Phase 1 formulas because it has a gentle but firm action on the movement of blood and at the same time builds up blood— ie it helps replace blood at same time it is being lost through menstruation.

Shu Di, the chief herb, supplements blood, Dang Gui both supplements and invigorates the blood, Bai shao specifically builds Liver blood and Chuan xiong promotes blood circulation and the flow of qi.

With the addition of Tao ren and Hong hua, the blood invigoration aspect of the formula is enhanced. However it is still mild enough to use even without symptoms of blood stasis. Tao ren in the moderate dose used here, regulates blood flow downward and assists in generation of new blood after expulsion of old blood.

It expands blood vessels and increases blood flow through them facilitating restructuring of the endometrium and encouraging menstrual flow. It inhibits coagulation.

Hong Hua is commonly used with Tao Ren, the two herbs complementing each other's effect. Tao ren tends to target specifically localized stasis while Hong hua has a more generalized action. In the dose used here Hong Hua invigorates the blood and moves it quite strongly. It warms the channels and quickens the blood to promote menstrual blood flow and the breakdown of the uterine lining.

To this base of Tao Hong Si wu tang we add more herbs which will invigorate blood flow, namely Yi Mu Cao, Ji Xue Teng , Dan shen, Chuan xiong, Shan Zha and Chuan Niu Xi.

Both Yi Mu cao and Dan Shen are cooling and moderate the warming effects of some of the other herbs like Shan Zha, Chuan Xiong, Dang gui and Hong hua.

Yi mu cao is a gentle blood mover and is commonly used in formulas addressing menstrual issues. It moves blood without harming new blood and nourishes the newly forming blood without causing any further stagnation.

Dan shen likewise invigorates and cools the blood but in addition it reinforces blood and

calms the shen. This last point is important in regulating periods since the uterus and the Heart qi must communicate smoothly (via the Bao Mai) if the uterus is to open and discharge the menstrual blood. Dan shen also has the attribute of facilitating the expulsion of retained blood and generating new blood hence promoting the reconstruction of the endometrium that occurs during the period.

Ji Xue Teng boosts the supplementing effect of Shu Di, at the same time as encouraging movement. Shan zha known for its harmonious properties, transforms static blood and protects newly generated blood and also gently releases constrained qi.

Because of the interdependent relationship between qi and blood it is important to promote the movement of qi at the same time that we regulate blood. Xiang fu, used in many gynecological formulas, fulfills this role fittingly.

To provide more motive force to make the period flow well we add Chuan Niu Xi which opens the cervix and guides the blood down.

So overall we have a formula which targets the blood, and moves it gently but firmly. We are not so concerned with breaking up stagnation in the uterus with this formula, but if that is necessary we will use the next formula Jade Moon Phase 1 Invigorate.

Herbs; Flavour, nature and site of action

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Herbs used to invigorate the Blood and relieve stasis

Chuan xiong (Chuanxiong Rhizoma)

Acrid, warm. Liver, Gall bladder and Pericardium channels.

(*Sheng*) *shan zha* (Crataegi Fructus) (from Food stagnation category).

Sour and sweet, slightly warm. Spleen, Stomach and Liver channels.

Hong hua (Carthami Flos)

Acrid, warm. Heart and Liver channels.

Tao Ren (Persicae semen)

Bitter, neutral. Heart, Liver, Lung and Large Intestines channels.

Yi mu cao (Leonuri Herba)

Acrid and bitter, slightly cold. Heart, Liver and Bladder channels.

Ji xue teng (Spatholobi Caulis)

Bitter and sweet, warm. Heart, Liver and Spleen channels.

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver channels.

Chuan Niu Xi (Cyathulae radix)

Bitter and sour, neutral Liver and Kidney channels

Herbs used to regulate qi

Xiang fu (Cyperi Rhizoma)

Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Prescribing Jade moon Phase 1 Regulate

Whereas formulas like Si Wu tang and Tao Hong Si Wu Tang can be used for a long time, use of Jade Moon Phase 1 Regulate should be limited since it has a single focus on blood movement. We will prescribe this formula for 3 - 4 days to achieve a very specific purpose. After several days of use the period flow should be diminishing or finished. The lining of the uterus should be smoothly restructured, the superficial layers of the previous cycle's lining removed, and a smooth basis provided for the new lining will be built as soon as it is primed to do so by the estrogen the ovary is already preparing to produce.

If it is the case that an attempt to conceive has not been made during the previous cycle, or there is a definitive negative pregnancy test then Phase 1 formulas can be commenced 2 or 3 days before the period and continued throughout the first 3 days of flow.

In the case where menstrual bleeding is excessive or does not abate after a few days you can combine this formula with the formula for heavy periods, [Jade Restraint](#).

If there is significant qi or blood deficiency be careful not to induce too much movement. Think about using [Jade Moon Phase 1 regulate](#) in conjunction with a tonic formula such as [Womens Precious](#) or [Ten Treasures](#).

2 Jade Moon

Phase 1, Invigorate

Promote menses, with pain

As is the case with [Jade Moon Phase 1 Regulate](#), here our focus is fairly and squarely on the uterine lining and the blood. But in this case we need to do something a little stronger than just give the menstrual flow a helping hand.

Pain is usually an indication of something stuck and not flowing - the qi or the blood or both are obstructed. In this case we need to actually help break up stasis or congealing of blood or other aspects of stagnation in the uterine lining. We will use this formula if there are any signs that the uterine lining is not coming off smoothly and seamlessly during the period. For example, if there is cramping or stabbing or aching pain, in the abdomen or the lower back then we know that movement of qi or the blood is not completely unfettered and we will want to ensure that no stagnation remains which could interfere with the tissue and circulation of the new lining which will be constructed once the period flow has been discharged. [Jade Moon Phase 1 Invigorate](#) addresses all the possible reasons that the blood might not move as easily as we would like. We will use herbs that thin the blood and relieve clotting, herbs that encourage the qi to move and hence lead the blood, herbs to warm the channels and ease the flow through them and herbs to open the cervix and lead the blood down. By easing the flow such, pain should be ameliorated.

Dang gui (Angelicae sinensis Radix)
Chi shao (Paeoniae Radix rubra)
Chuan xiong (Chuanxiong Rhizoma)
Tao ren (Persicae Semen)
(Chao) Gui zhi (Cinnamomi Ramulus)
Dan Shen (Salviae miltiorrhizae Radix)
(Sheng) Shan zha (Crataegi Fructus)
(Sheng) Pu huang (Typhae Pollen)
Yan hu suo (Corydalis Rhizoma)
(Cu) Xiang fu (Cyperis Rhizoma)
Xu duan (Dipsaci Radix)
Chuan Niu Xi (Cyathulae radix)

Focus of treatment

- Invigorate Blood to resolve Blood stasis and relieve pain
- Regulate qi to resolve qi stagnation and lead the Blood
- Tonify Kidney, to relieve lower back pain

Construction and therapeutic strategy of the formula

Jade Moon Phase 1 Invigorate starts out with Tao Hong Si wu tang as did our previous formula but gives more emphasis to the blood and qi moving aspect - hence we have removed Shu Di and we have replaced Bai shao with Chi shao and replaced Hong Hua with stronger blood regulating agents.

Chi shao not only clears blood stagnation but also any heat in the blood include heat that has built up as a result of the stagnation. It prevents clotting.

Yan hu suo replaces Hong hua thanks to its superior analgesic properties. It raises the pain threshold, alleviates crampy pain and has a calming action. It is said to move the qi in the blood and the blood in the qi thus ensuring no impediment to movement.

Tao ren used here in a larger dose than the previous formula breaks up blood stasis and stops pain.

Dang gui invigorates and harmonises the blood which, in conjunction with the other invigorating herbs reduces pain. It is also plays an important role in protecting the blood from exhaustion when there is a lot of blood movement.

Chuan xiong soothes spasms of smooth muscle. It does this by entering the blood level to move the qi, working synergistically with Xiang fu which moves the blood in the qi level. Its calming action on the nervous system helps to elevate the pain threshold.

Pu huang cools and moves Blood with its slippery nature. It clears stagnation, relieves pain and controls heavy bleeding.

Dan shen invigorates and cools the blood but in addition it reinforces blood and calms the shen. As we discussed with **Jade Woman regulate** a calm shen and an open Bao Mai is important for menstruation to function normally. And quietening the spirit is important

when there is pain – it increases the pain threshold and reduces distress.

Dan shen also has the attribute of facilitating the expulsion of retained blood and generating new blood hence promoting the restructuring of the endometrium that occurs during the period.

Shan zha is a gentle and harmonious blood and qi mover which reduces pain.

Gui zhi is used to warm and expand blood vessels and increase blood flow through them. It clears cold from the Chong and the Ren channels relieving painful obstruction, and counteracts the cooling effect of Chi shao, Pu huang and Dan shen.

Herbs such as Pu huang, Chi shao, Chuan xiong and Shan zha are thought to change uterine contractions from fast irregular waves into regular smooth and more effective contractions in order to more effectively remove the old lining from the uterus and reduce pain.

To provide more motive force to make the period flow well we add Chuan Niu Xi which opens the cervix and guides the blood down.

Xu Duan supports both Kidney and Liver and at same time gently invigorates the blood.

It is used in [Jade Woman Invigorate](#) to promote movement of blood and unblock collaterals in order to relieve lower back pain that might occur during menstruation.

For more discussion of base formulas used in construction of a blood stagnation formula please see discussion of construction of the formula [Jade woman Flow](#).

Herbs; Flavour, nature and site of action

Herbs used to invigorate the Blood and relieve stasis

Chuan xiong (Chuanxiong Rhizoma)

Acrid, warm. Liver, Gall bladder and Pericardium channels.

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver channels.

Tao Ren (Persicae semen)

Bitter, neutral. Heart, Liver, Lung and Large Intestines channels.

Yan hu suo (Corydalis Rhizoma)

Acrid and bitter, warm. Heart, Liver and Spleen channels.

(Sheng) Pu huang (Typhae Pollen) from Stop bleeding category

Sweet, neutral. Liver and Heart channels.

(Sheng) shan zha (Crataegi Fructus) from Food stagnation category.

Sour and sweet, slightly warm. Spleen, Stomach and Liver channels.
Chuan Niu Xi (Cyatulae radix)
Bitter and sour, neutral Liver and Kidney channels

Herbs used to cool the Blood and relieve stasis
Chi shao (Paeoniae Radix rubra)
Bitter and sour, slightly cold. Liver and Spleen channels.

Herbs used to supplement the Blood
Dang gui (Angelicae sinensis Radix)
Sweet and acrid, warm. Liver Heart and Spleen channels.

Herbs used to warm and open the channels and invigorate the Blood
(Chao) Gui zhi (Cinnamomi Ramulus) from the Exterior releasing category.
Acrid and sweet, warm. Heart, Lung and Bladder channels.

Herbs used to regulate qi
Xiang fu (Cyperi Rhizoma)
Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Herbs used to support the Kidneys and invigorate the Blood
Xu duan (Dipsaci Radix) (from Supplement yang category)
Bitter, sweet and acrid. Slightly warm. Liver and Kidney channels.

Prescribing Jade Moon phase 1 Invigorate

If there are any symptoms or signs of stagnation during the period then this is the correct Phase 1 formula to use. Hindrance to the flow of qi and blood most commonly takes the form of pain, but if your patient has other signs like dark or clotty menstrual flow, or a history of endometriosis or other gynecological disease related to stagnation, then use of [Jade Moon Phase 1 Invigorate](#) is appropriate.

As was the case with our previous Phase 1 formula, [Jade Moon Phase 1 Invigorate](#) will only be prescribed for a short time with a very specific purpose in mind. Ask your patient to take it from Day 1 to 4 of their period (or Day 3 if the period is very short) to achieve a herbal version of a D and C. We aim to not only smoothly remove and restructure the uterine lining during this time but also to expel any stagnation, or the basis for stagnation that could interfere with the new uterine lining which will form in Phase 2.

If it is the case that an attempt to conceive has not been made during the previous cycle, or there is a definitive negative pregnancy test then Phase 1 formulas can be commenced 2 or 3 days before the period and continued throughout the first 3 days of flow.

You can warn your patient there may be some heavier bleeding than usual as you are clearing the stagnation (sometimes with expulsion of large clots) but ask them to tolerate this for 2 or 3 cycles providing it is not extreme or debilitating.

In the case where menstrual bleeding is excessive or does not abate after a few days you can combine this formula with the formula for heavy periods [Jade Restraint](#).

Signs of stagnation such as a dark or clotty menstrual flow, usually resolve more quickly than does the pain. However if period pain does resolve quickly (along with any accompanying signs of stagnation) then switch to the previous Phase 1 formula, [Jade Moon Phase 1 Regulate](#).

If symptoms and signs of stagnation are persistent, consider endometriosis as a possible diagnosis and treat accordingly with [Jade Disperse 1 or 2](#).

It is important to emphasize the importance of treatment during this phase to your patient with infertility, especially if are any signs or symptoms of blood stasis. Women who have period pain or a history of endometriosis will usually be only too happy to comply.

Jade Moon Phase 2 formulas

Phase 2 is the most crucial phase in building fertile potential in women with functional infertility related to Kidney deficiency. In this phase the all important egg matures to a point where it is able to be released and fertilised. And in this phase the new endometrium builds and implantation sites are created.

In marked contrast to our approach in Phase 1 we now move into a nourishing and supplementing phase. It is this phase after the period that the yin and blood stores must be replenished, so from Day 3 or 4 of the menstrual cycle we use a formula which ensures that both the yin and the blood will be supported. Supplementing the Kidney jing and yin encourages the development of the follicles in the ovary and replenishing blood stores ensures that the Chong channel will be filled up and that there will be good growth of a thick and nourishing endometrium.

If we were to track the progress of the yin and the blood in Phase 2 by ultrasound, we would see several follicles on the ovary growing in size, then one becoming dominant as the egg inside it grew towards maturity. The fluid of the follicle must provide maximal nutrition to the oocyte inside. Reinforcing yin supports this nourishment of the egg. The ultrasound would also reveal the uterine lining gradually thickening from one or two millimetres to 8mm or more as the blood builds up and the Chong channel fills.

Supplementing blood supports this process. But even without an ultrasound we know that this formula is working well and that yin is building adequately when the secretions from the cervix slowly increase until by the time we reach Phase 3 they are plentiful, thick and slippery.

Patients with unexplained functional infertility or who do not have success with IVF are often told that they have poor egg quality. You may be asked if this can be improved with Chinese herbs. The answer is yes and no. The chromosomes or DNA of the oocyte or egg cannot be changed and mutations collected through the decades of life cannot be corrected/erased with Chinese herbs.

But maybe the vitality or function of other parts of the egg cell can. Certainly we can aim to maximize nutrition and blood supply to the ovary and its follicles ensuring the egg

receives all the nutrients it needs.

One of the things we have learned from IVF clinics is that poor quality eggs produce poor quality embryos, ie they don't grow and divide vigorously or quickly. Some data suggests that the activity of the mitochondria in the individual egg cells can be a significant factor in determining their quality. The number and function of the mitochondria in these egg cells is thought to be an important factor in successful fertilization, and in post implantation development. There is evidence that certain Kidney tonic herbs increase the mitochondrial output of ATP - the energy currency of the cell. Hence their inclusion in Phase 2 and 3 formulas.

In summary, in prescribing these Phase 2 formulas, we aim to increase responsiveness of the ovary to stimulation by the pituitary gland and hence the growth of healthy eggs and follicles at a rate that is not too fast or too slow. We aim to maximize nutrition and delivery of nutrients to the follicles and the vitality of the eggs inside them by reinforcing and balancing the yin and yang, and nourishing blood and promoting the movement of qi.

3 Jade Moon

Phase 2, Under 35

Promote ovary function, women under 35yrs

If Kidney yin and yang are balanced, blood is ample and the Liver qi is moving well then we can expect that the functions of Phase 2 will be fulfilled well; ovary function will be maximized, the endometrium will thicken and hormone levels will be optimal. Jade Moon Phase 2 for women under 35 aims to help achieve these outcomes.

The formula

Shu di (Rehmanniae Radix preparata)
Shan yao (Dioscoreae Rhizoma)
Shan yu rou (Corni Fructus)
Dang gui (Angelicae sinensis Radix)
Bai shao (Paeoniae Radix alba)
Dan shen (Salviae miltiorrhizae Radix)
Dan pi (Moutan Cortex)
Fu ling (Poria)
Ze xie (Alismatis Rhizoma)
Sha ren (Amomi Fructus)
Tu si zi (Cuscutae Semen)
Bu gu zhi (Psoraleae Fructus)
Xiang fu (Cypero Rhizoma)
He huan pi (Albiziae Cortex)
Chai hu (Bupleuri Radix)
Gou qi zi (Lycii Fructus)

Focus of treatment

- Reinforce Kidney yin to enhance follicular development
- Nourish blood to promote endometrial growth
- Regulate Liver qi to keep order and synchrony in the menstrual cycle

Construction and therapeutic strategy of the formula

In Phase 2 we will use as our base, the famous Liu Wei Di Huang Wan (Six Flavour Tea Pills) first described in the form used today nearly a thousand years ago.

Liu Wei Di Huang Wan is viewed as a longevity formula by many specialists and indeed we want to use it to enhance the longevity of the ovaries to preserve and improve fertility.

We want to counteract aging processes that dry and wither the juices leading to eggs of poor quality and a thin uterine lining. Laboratory studies have shown that this formula can stimulate follicle development in the ovary.

Our main objective in using Liu Wei Di Huang Wan is to supplement Kidney yin and jing.

Shu di is its chief herb and it strongly enriches the Kidney yin and the essence needed to safe guard the integrity of the egg. Because this is such an essential herb for our purposes here, we use it even in situations where its rather indigestible richness can challenge the Spleen function. To help digestion of Shu Di we always add Sha Ren. Shan yao is also used to support Spleen function. Apart from a concern about digesting the formula it is also important that we support the body's vitality by encouraging the Spleen in its function of generating acquired qi or postnatal essence. If this were not adequate then the jing or essence we are trying to build in the follicles might be drained.

Shan Zhu Yu nourishes the Liver yin to support the supplementation of the Kidney yin. Shan Zhu Yu has an astringent nature so it will help prevent leakage of essence. It is vitally important all essence created remains in the follicles.

Added to these 3 main tonics are two important blood tonics – this addition converts Liu Wei Di Huang Wan to a formula known as Gui shao di huang wan (Dang gui and Peony Rehmania Pills).

Dang gui and Bai Shao are herbs which are very commonly combined resulting in effective supplementation of the blood alongside gentle movement or harmonization.

Next come 3 herbs which are known as the assistant herbs of Liu Wei Di Huang Wan. They provide important checks and balances. Dan Pi ensures no heat builds up in the Liver as a result of the warming nature of other herbs. Ze xie has the role of clearing any heat that might build up in the Kidney as a result of the rich tonic herbs and because of the tendency for heat to rise when yin is insufficient. And Fu ling, in its transforming capacity, has the role of protecting the digestive system from being compromised by the build up of damp which might occur with the sorts of tonic herbs we are using. Sha ren and Bu Gu Zhi ably support this role.

To cater for all the needs of Phase 2 of the menstrual cycle we add a few more herbs to play key roles.

Gou qi zi is an important herb for conserving essence and here augments the function of Shu di and Shan Yu Rou.

Yang tonics Tu si zi and Bu gu zhi are added in recognition that Yin can only grow from Yang. The yang tonics are not used in large doses at this stage of the cycle where establishing yin is our main priority. However they are an important basis for the growth of yin and a catalyst for the next stage where Yang prepares to exert its influence as the Yin reaches its zenith (see diagram above). In the ovary this is mirrored by events affecting the follicle. Just before ovulation, the egg will become luteinised and start to produce small amounts of progesterone, heralding the luteal (or warmer, yang) phase. Additionally the yang tonics have the capacity to increase the activity of the mitochondria in the cytoplasm of the egg as it is maturing.

Movement of qi is something we cannot ignore. Things are constantly in flux as the menstrual cycle moves from one stage to another. Xiang fu and Chai hu will ensure that qi moves in an unimpeded way.

In order to build yin there must be inner quiet ie the shen must be stable. Anxiety and restlessness are not conducive to gathering and conservation of yin. He Huan pi calms all the yin organs hence its important role in this formula. In addition to calming the spirit and supporting the replenishment of the yin, it also helps to move the blood gently. Some sources say that this herb helps to build tissue, which supports our purpose here in building new endometrial tissue. The generation of new endometrial tissue is enhanced by the capacity of Dan Shen to promote the development and function of the newly forming small blood vessels as the lining increases in thickness.

Dan shen is also useful for settling the shen.

Herbs; Flavour, nature and site of action

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver, Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Shu di (Rehmanniae Radix preparata)

Sweet, slightly warm. Liver and Kidney channels.

Herbs used to supplement Liver and Kidney

Shan yu rou (Corni Fructus) (from the Astringing category)

Sour and astringent, slightly warm. Liver and Kidney channels.

Gou qi zi (Lycii Fructus) (from the Yin tonic category)

Sweet, neutral. Liver, Kidney and Lung channels.

Herbs used to supplement Spleen and Kidney

Shan yao (Dioscoreae Rhizoma) (from the Qi tonic category)

Sweet, neutral. Spleen, Lung and Kidney channels.

Herbs used to promote transformation and clearing of Damp

Fu ling (Poria)

Sweet and bland, neutral. Heart, Lung, Spleen and Kidney channels.

Ze xie (Alismatis Rhizoma)

Sweet and bland, cold. Kidney and Bladder channels.

Sha ren (Amomi Fructus)

Acrid, warm. Stomach and Spleen channels.

Herbs used to invigorate the Blood

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver channels.

Herbs used to cool and invigorate the Blood

Dan pi (Moutan Cortex)

Bitter and acrid, cool. Heart, Liver and Kidney channels.

Herbs used to supplement the Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Bu gu zhi (Psoraleae Fructus)

Acrid and bitter, warm. Kidney and Spleen channels.

Herbs used to regulate qi

Xiang fu (Cyperi Rhizoma)

Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Chai hu (Bupleuri Radix) (from the Exterior releasing category)

Bitter and acrid, slightly cold. Pericardium, Liver, San Jiao and Gall Bladder channels.

Herbs used to calm the shen

He huan pi (Albiziae Cortex)

Sweet, neutral. Heart and Liver channels.

Prescribing Jade Moon Phase 2 (under 35)

Ask your patient to take this formula from the end of the period (or from Day 3 or 4). Even if the period flow continues on past Day 4 it is still appropriate to begin [Jade Moon Phase 2](#) since follicular development begins early in the cycle and we want to support this. For women who have a scanty or short menstrual flow this formula can be begun on Day 3. These women tend to be Yin and Blood deficient so attention to these deficits should begin a little earlier.

This formula can be taken for many months if necessary, and if for some reason no other [Jade Moon Phase](#) formulas can be taken then this is the most important one of the series and can be taken throughout the whole menstrual cycle. Try to encourage persistence with this formula even if Spleen is weak and Jade Moon Phase 2 causes some loose stools or bloating. In this case you can prescribe other formulas to help the Spleen digest the herbs, for example [Prosperous Farmer](#).

We rely on this formula to help build and reinforce the yin. Of course this can't happen without appropriate lifestyle habits which allow for those quiet and replenishing moments essential for the mind to settle and the yin to gather. When the mind settles the yin coalesces and when the yin gathers it provides a firm base for continued shen stability. This is important for all the processes we are supporting in Phase 2 and will continue as move into Phase 3. If the mind can't settle and sleep is restless add [Celestial Emperors Blend](#).

Taking Chinese herbs at the same time as IVF drugs is not usually recommended. Defer use of this formula during the acute phase of an infection or attack by an external pathogen.

4 Jade Moon

Phase 2, Over 35

Promote ovary function, women 35 yrs and over

The difference between the Phase 2 formulas for women below or over 35 is simply that extra Kidney Yang herbs are needed for women over 35 (their Kidney yang will have begun to decline as well as their Kidney yin) while for younger women keeping the Liver qi and blood healthy and maintaining regular cycles is more of a treatment focus.

Although similar herbs are used in each formula the proportions of some herbs are different, for example since Spleen function and digestive energy starts to decline after 35 years more Sha ren is needed to help digest the tonics.

The formula

Shu di (Rehmanniae Radix preparata)
Shan yao (Dioscoreae Rhizoma)
Shan yu rou (Corni Fructus)
Dang gui (Angelicae sinensis Radix)
Bai shao (Paeoniae Radix alba)
Dan shen (Salviae miltiorrhizae Radix)
Dan pi (Moutan Cortex)
Fu ling (Poria)
Ze xie (Alismatis Rhizoma)
Sha ren (Amomi Fructus)
Tu si zi (Cuscutae Semen)
Bu gu zhi (Psoraleae Fructus)
(Cu) Xiang fu (Cyperis Rhizoma)
He huan pi (Albiziae Cortex)
Yin yang huo (Epimedii Herba)
Lu jiao jiao (Cornu cervi)
Zi shi ying (Fluoritum)

Focus of treatment

- Tonify Kidney Jing, Yin and Yang to strongly promote ovarian function
- Nourish blood to promote endometrial growth
- Regulate Liver qi and blood to maintain order and synchrony in the menstrual cycle

Formula construction and therapeutic strategy

Jade Moon Phase 2, 35+ is based on Gui shao di huang tang as was the previous one and is constructed in the much the same way with some subtle but key shifts of emphasis.

Building the yin and the blood is still a therapeutic priority for Phase 2 but in women over 35 we increase the support for Kidney yang. This is because Kidney yang as well as Kidney yin is waning as the ovaries approach the later stages of their fourth decade.

While boosting Kidney yang (or jing) does not make the ovaries any younger it can make them a bit more responsive.

And as we saw earlier Kidney yang plays a particularly important role in raising energy production in the mitochondria of the egg cells. We know from animal studies that Kidney yang tonics are more effective at boosting this energy production than yin tonics.

Jade Moon Phase 2, 35+ adds 4 Kidney yang tonics to the base of Gui Shao Di Huang wan.

Tu Si zi is a Kidney yang tonic which fulfills many of the needs of Phase 2. It boosts Kidney yang while reinforcing the yin and securing the essence. It also supports the Spleen. Bu Gu zhi is another Kidney yang tonic which has a dual function of supporting Spleen function. Yin yang hu strongly boosts Kidney yang but is used here in a small dose since it is very warming. Lu Jiao Jiao strongly nourishes the Kidney jing or essence and promotes ovarian activity. It also helps to build blood.

Zi shi ying warms and unblocks the Chong and the Ren channels to improve egg quality; it calms the spirit and builds Liver blood. He Huan Pi also calms the spirit and serves an important function in reducing the stress and distress of infertility which can be very marked in women facing infertility, especially those reaching the end of their reproductive years.

The dose of Shu di in this Phase 2 formula for patients 35 or over is increased to

emphasise the need to foster the yin and the essence. Sha ren is increased in dose to help digest the Shu di and in recognition of the fact that Spleen function declines with age too. Xiang fu regulates the qi and supports the Liver qi in keeping smooth the transitions of the menstrual cycle.

Herbs; Flavour, nature and site of action

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver, Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Shu di (Rehmanniae Radix preparata)

Sweet, slightly warm. Liver and Kidney channels.

Herbs used to supplement Liver and Kidney

Shan yu rou (Corni Fructus) (from the Astringing category)

Sour and astringent, slightly warm. Liver and Kidney channels.

Herbs used to supplement Spleen and Kidney

Shan yao (Dioscoreae Rhizoma) (from the Qi tonic category)

Sweet, neutral. Spleen, Lung and Kidney channels.

Herbs used to promote transformation and clearing of Damp

Fu ling (Poria)

Sweet and bland, neutral. Heart, Lung, Spleen and Kidney.

Ze xie (Alismatis Rhizoma)

Sweet and bland, cold. Kidney and Bladder channels.

Sha ren (Amomi Fructus)

Acrid, warm. Stomach and Spleen channels.

Herbs used to invigorate the Blood

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver channels.

Herbs to cool and invigorate the Blood

Dan pi (Moutan Cortex)

Bitter and acrid, cool. Heart, Liver and Kidney channels.

Herbs used to supplement the Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Bu gu zhi (Psoraleae Fructus)

Acrid and bitter, warm. Kidney and Spleen channels.

Yin yang huo (Epimedii Herba)

Acrid and sweet, warm. Liver and Kidney channels.

Lu jiao jiao (Cornu cervi)

Sweet and salty, warm. Liver and Kidney channels.

Herbs used to regulate qi

Xiang fu (Cyperi Rhizoma)

Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Herbs used to calm the shen

He huan pi (Albiziae Cortex)

Sweet, neutral. Heart and Liver channels.

Zi shi ying (Fluoritum)

Sweet, warm. Heart and Liver channels.

Prescribing Jade Moon Phase 2 – over 35 years.

Prescribe [Jade Moon Phase 2, 35+](#) just as you do the previous formula, beginning towards the end of the period.

In women reaching their late 30s and 40s we encounter more often imbalances which may need our attention. There may already be some signs of perimenopause like reduced vaginal secretions, or scanty menses or irregular cycles. In this case we need to clear heat and it is appropriate to add a formula such as [Temper Fire](#) to [Jade Moon Phase 2, 35+](#). As yin diminishes, and with the stress of infertility, some patients experience insomnia and restlessness. In this case suggest using [Celestial Emperors Blend](#) alongside [Jade Moon Phase 2, 35+](#) and especially in the evening.

If the Spleen function is weak and [Jade Moon Phase 2, 35+](#) causes loose stools or digestive upsets combine it with [Digest Aid](#) or [Prosperous Farmer](#).

Taking Chinese herbs at the same time as IVF drugs is not usually recommended.

Defer use of this formula during the acute phase of infection or attack by an external pathogen.

Phase 3

5 Jade Moon

Phase 3

Promote ovulation

Any treatment applied in Phase 3 of the menstrual cycle must take into account a number of different strategies to address the many different physiological activities occurring as ovulation approaches.

Phase 3, like Phase 1, is about movement but this time it is movement of qi and fluids as well as blood. The fullness of yin that has been reached by this stage is consolidated by the use of a number of strong yin tonic herbs. This is important since the production of plentiful moist and lubricating secretions must occur now in preparation for transport of sperm through the cervix. This is especially so for women with partners in their 40s or more whose sperm don't travel so well when there is a lack of good quality cervical secretion (with a much reduced chance of a pregnancy). Here is an elegant example of the interdependence yin and yang.

Next in Phase 3, we are anticipating the arrival of the yang, born from the base of yin. This manifests as maturation of the oocyte in the follicle and then a lot of activity as it detaches from the follicle and is hurled into the pelvic cavity. There is more activity as the fallopian tube with its wafting fimbriae catches the egg and guides it into the fallopian tube. If there are healthy sperm waiting for the egg there is a good chance one of them will fertilize it. This may represent the greatest spark of yang yet, as a potential new life forms. Now the cilia with their constant rhythmic beating guide the embryo (if there has been a conception) and nourishing mucus secretions along the tube towards the uterus. All the time the embryo is dividing into more and more cells. And needs the energy to do that.

Pivotal to the smooth release of the egg from the follicle is the state of the shen and the

activity of the Bao mai.

In summary, **Jade Moon Phase 3** encourages the final ripening of the egg in the follicle and its release, the production of fertile mucus and unobstructed movement in the tubes.

The formula

Dang Gui (Angelicae sinensis Radix)
Chi shao (Paeoniae Radix rubra)
Bai shao (Paeoniae Radix alba)
Shan yao (Dioscoreae Rhizoma)
Shu di (Rehmanniae Radix preparata)
Nu zhen zi (Ligustri lucidi Fructus)
Dan pi (Moutan Cortex)
Fu ling (Poria)
(Zhi) Huang qi (Astragali Radix)
Tu si zi (Cuscutae Semen)
Bu gu zhi (Psoraleae Fructus)
Rou cong rong (cistanches herba)
Hong hua (Carthami Flos)
Ji xue teng (Spatholobi caulis)
Zao jiao ci (Gleditsiae Spina)
Zi shi ying (Fluoritum)
He huan pi (Albiziae Cortex)
(Cu) Xiang fu (Cypero Rhizoma)

Focus of treatment

- Regulate Qi and blood to facilitate release of the egg and transport in the Fallopian tube.
- Tonify Kidney yin and yang to ensure final ripening of the egg, and the production of fertile mucus.
- Calm the shen to maintain communication between the Bao Mai and the Uterus.

Formula construction and therapeutic strategy

Jade Moon Phase 3 is a variation of the modern formula designed by Dr Xia Gui Sheng, Bu Shen Cu Pai Luan (Reinforce Kidney Ovulation formula). Bu Shen Cu Pai Luan is another variation on Gui Shao Di Huang Wan with addition of Kidney yang herbs and blood moving herbs.

Jade Moon Phase 3 extends this formula with some substitutions and further additions.

Jade Moon Phase 3 incorporates all the herbs of Gui Shao Di Huang wan with the exception of Shan Zhu Yu and Ze Xie.

The construction and therapeutic strategy of Gui Shao di Huang wan has been described earlier and is no different here where safeguarding the yin is of paramount importance. We see its manifestation in the cervical secretions which should be increasing at this point.

To reinforce the importance of yin consolidation at this stage we add Nu Zhen Zi to support Kidney yin (replacing Shan zhu Yu).

Next we add herbs which will facilitate all the movement that occurs in Phase 3.

Ji Xue teng activates and supplements the blood and also relaxes muscles and soothes collaterals – this will be helpful in maintaining fluidity in the movement of the tubes.

Xiang Fu, well known in gynecology as a qi regulator par excellence, assists in ensuring unfettered movement of, and travel inside, the tubes. The vinegar fried form of Xiang Fu enhances its pain relieving qualities and hence addresses any ovulation pain that might be causing discomfort.

The other herbs we use in **Jade Moon Phase 3** to promote movement are Hong Hua, Chi shao and Zao Jiao Ci.

Hong hua will ensure there is no stasis, but at the moderate dose used in this formula it also has the function of reinforcing the sea of blood (and hence the endometrium) which should be reaching its maximum as we approach ovulation.

Chi Shao promotes blood circulation at the same time it cools the blood. It helps Xiang fu to alleviate any ovulation pain.

Zao Jiao ci promotes ovulation by invigorating blood and reducing swelling.

An important shift in emphasis occurs now as we prepare for the yang part of the cycle, the luteal phase. To support this we add 3 Kidney yang tonics and 2 herbs which warm the yang.

The Kidney tonics we choose are those with proven ability to strongly enhance ATP production. We want to increase the capacity of the egg as much as possible so it can provide the energy to drive the cell divisions of a new embryo.

Tu si zi, Rou Cong Rong and Bu Gu zhi are all Kidney yang tonics which fulfill this role. The warmth of Huang qi reinforces yang transport and with Zao Jiao Ci it lifts and propels the ovulated egg toward the waiting Fallopian tube. Using the zhi form of Huang Qi enhances its capacity to lift and guide.

Zi shi ying is also a warming herb with the useful action of warming the womb in preparation for an embryo and simultaneously unblocking the Chong and Ren channels. It moistens to enhance cervical secretions, and calms and settles the mind so that ovulation can proceed smoothly.

He huan Pi once again plays an important role in keeping the mind calm. This is vital for different reasons in Phase 3 than in the other phases. If there is a severe disturbance to the shen and the Bao Mai is affected, ovulation can be delayed or sabotaged altogether. He Huan Pi helps to prevent this happening even in the face of considerable stress. Its capacity to relieve constraint and invigorate blood also plays a role in facilitating the many activities of this phase.

Herbs; Flavour, nature and site of action

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver, Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Shu di (Rehmanniae Radix preparata)

Sweet, slightly warm. Liver and Kidney channels.

Herbs used to supplement Qi

Shan yao (Dioscoreae Rhizoma)

Sweet, neutral. Spleen, Lung and Kidney channels.

(Zhi) Huang qi (Astragali Radix)

Sweet, slightly warm. Spleen and Lung channels.

Herbs used to promote transformation and clearing of Damp

Fu ling (Poria)

Sweet and bland, neutral. Heart, Lung, Spleen and Kidney.

Herbs used to cool and invigorate the Blood

Dan pi (Moutan Cortex)

Bitter and acrid, cool. Heart, Liver and Kidney channels.

Chi shao (Paeoniae Radix rubra)

Bitter and sour, slightly cold. Liver and Spleen channels.

Herbs used to invigorate the Blood

Hong hua (Carthami Flos)

Acrid, warm. Heart and Liver channels.

Ji xue teng (Spatholobi Caulis)

Bitter and Sweet, warm. Heart, Liver and Spleen.

Herbs used to invigorate the Blood and discharge swelling.

Zao jiao ci (Gleditsiae Spina) (from Phlegm transforming category)

Acrid, warm. Liver, Stomach and Lung.

Herbs used to supplement the Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Bu gu zhi (Psoraleae Fructus)

Acrid and bitter, warm. Kidney and Spleen channels.

Rou cong rong (Cistanches herba)

Sweet and salty, warm. Kidney and Large Intestine channel.

Herbs used to supplement Yin

Nu zhen zi (Ligustri lucidi Fructus)

Sweet and bitter, cool. Liver and Kidney channels.

Herbs used to regulate qi

Xiang fu (Cyperi Rhizoma)

Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Herbs used to calm the shen

He huan pi (Albiziae Cortex)

Sweet, neutral. Heart and Liver channels.
Zi shi ying (Fluoritum)
Sweet, warm. Heart and Liver channels.

Prescribing Jade Moon Phase 3

This is a short use formula with strongly defined action albeit in many directions. Typically it is taken a couple of days before ovulation and approximately 3 days after, 5 to 7 days all up. It is ideal to start this formula at the first signs of stretchy cervical secretions. For women who have built up good amounts of Yin and produce copious fertile mucus over several days this is an easy instruction to follow. However if your patient only sees fertile mucus for a day, or not at all, then we must just try to gauge roughly when she is preparing to ovulate. If her cycle is regular then this is not difficult, however if her cycle and her time of ovulation is very erratic then you could ask her to use the urine LH indicator kit and instruct her to start using [Jade Moon Phase 3](#) when there are signs of rising LH (this may be a little before the definite positive sign appears on the kit).

If all the requirements of Phase 3 are met ovulation will occur and the basal body temperature will rise several points of a degree as progesterone starts to be produced.

Taking Chinese herbs at the same time as IVF drugs is not usually recommended.

Defer use of this formula during the acute phase of an infection or attack by an external pathogen.

Phase 4

6 Jade Moon

Phase 4

Support implantation

Once ovulation has occurred and a conception has taken place and the embryo has made its way to the uterus, our main concern will be the environment it meets and the nourishment it receives. We need to ensure that conditions are favourable for a successful implantation and the ongoing development of the embryo.

Gradually we are moving towards more support of Kidney yang as the cycle proceeds. Focusing on Kidney yang function in this phase means we are keeping the womb warm. It also means we are promoting the corpus luteum function of producing progesterone. Additionally we focus on reinforcing blood to ensure the uterine lining is equipped to nourish an embryo.

The formula

Bai Zhu (Atractylodis macrocephalae Rhizoma)

Fu ling (Poria)

Dang Gui (Angelicae sinensis Radix)

Bai shao (Paeoniae Radix alba)

Shu di (Rehmanniae Radix preparata)

Shan yao (Dioscoreae Rhizoma)

Shan yu rou (Corni Fructus)

Tu si zi (Cuscutae Semen)

Xu Duan (Dipsaci Radix)

Du Zhong (Eucommiae cortex)

Ba ji tian (Morindae officinalis radix)

Xiang fu (Cyperis Rhizoma)

Chai hu (Bupleuri Radix)

Zhi Gan Cao (Glycyrrhizae radix)

Focus of treatment

- Warm Kidney yang to promote progesterone production
- Nourish blood and support qi to promote secretion of nutrients by endometrium

Formula construction and therapeutic strategy

Jade Moon Phase 4 uses Kidney yang tonics combined with herbs which reinforce yin, tonify and regulate Qi and nourish blood. By nourishing blood we are helping to maintain good Chong channel function and therefore a thick and secretory endometrium ready to nourish an embryo.

A modified combination of You Gui wan (Restore the Right Kidney Pill) and Yu Lin Zhu (Fertility Pearls) is used to achieve this.

You Gui Wan combines Kidney yin tonics with Kidney yang tonics using the theory of Yin generating Yang. Yu Lin zhu is composed of Ba zhen tang (Eight treasure decoction) with additional Kidney yang tonics. From Ba zhen tang we choose qi tonics such as Bai Zhu since it not only supports Spleen qi but safe guards the fetus too. Fu Ling and Gan cao also support the Spleen function – healthy Spleen function means that blood manufacture and circulation will be maintained.

Blood tonics from Ba zhen tang like Dang Gui, Shu Di and Bai Shao all contribute to sustaining the endometrium. However the final blood herb of Ba Zhen tang, blood invigorating Chuan xiong, is not included since Phase 4 treatment aims to hold and not move the blood.

We borrow from You Gui Wan 3 herbs which supplement the Kidneys, Liver and Spleen. Shu Di strongly supplements the Kidney essence and the blood, while Shan Yao and Shan Zhu Yu indirectly supplement the same through benefiting Spleen and the Liver function.

Two Kidney tonics from Yu Lin Zhu, Tu Si Zi and Du Zhong are included next. These two herbs both fortify Kidney yang as well as nourishing yin. We add Xu Duan, which together with Tu Si Zi and Du Zhong, is known for its ability to safeguard a fetus and promote early pregnancy. Xu Duan also has the function of promoting blood circulation

without disturbing the blood. Hence it assists early placental development without risking the fetus. Finally a fourth Kidney yang tonic Ba Ji tian serves the purposes of [Jade Moon Phase 4](#) perfectly by boosting Kidney yang and nourishing the Chong channel. Xiang fu and Chai hu are added in small doses to prevent stagnation of qi – sometimes high levels of Progesterone in the luteal phase can cause some abdomen cramping and Xiang Fu can ameliorate this. Chai hu with Bai shao will sooth the Liver and reduce premenstrual symptoms if a conception has not occurred.

Herbs; Flavour, nature and site of action

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver, Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Shu di (Rehmanniae Radix preparata)

Sweet, slightly warm. Liver and Kidney channels.

Herbs used to supplement Spleen and Kidney

Shan yao (Dioscoreae Rhizoma) (from Qi tonic category)

Sweet, neutral. Spleen, Lung and Kidney channels.

Herbs used to supplement Liver and Kidney

Shan Zhu Yu (Corni Fructus) (from the Astringing category)

Sour and astringent, slightly warm. Liver and Kidney channels.

Herbs used to supplement Qi

Bai Zhu (Atractylodis macrocephalae Rhizoma)

Bitter and sweet, warm. Spleen and Stomach

Zhi Gan Cao (Glycyrrhizae radix)

Sweet, neutral. Heart, Lung. Spleen and Stomach channels.

Herbs used to supplement the Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Xu Duan (Dipsaci Radix)

Bitter, sweet and acrid, slightly warm. Liver and Kidney channels.

Du Zhong (Eucommiae cortex)

Sweet, warm. Liver and Kidney.

Ba ji tian (Morindae officinalis radix)

Acrid and sweet, slightly warm. Liver and Kidney channels.

Herbs used to regulate qi

Xiang fu (Cyperi Rhizoma)

Acrid and slightly bitter and sweet, neutral. Liver and San Jiao channels.

Chai hu (Bupleuri Radix) (from the Exterior releasing category)

Bitter and acrid, slightly cold. Pericardium, Liver, San Jiao and Gall Bladder channels.

Prescribing Jade Moon Phase 4

This formula is commenced a few days after ovulation or straight after ovulation if the Jade Moon Phase 3 formula is not being used. Continue it until the period comes or until a positive pregnancy test is received.

There is no contraindication to the use of this formula in an IVF cycle after embryo transfer. It can safely be combined with exogenous progesterone with the agreement of the relevant specialists.

There is also no contraindication to taking this formula in early pregnancy, however patent formulas more directed to miscarriage prevention could be recommended.

Defer use of this formula during the acute phase of an infection or attack by an external pathogen.

Immune Infertility Formulas

Immune infertility is a new and exciting area of research in reproductive medicine. When it comes to talking about immune infertility we still have more questions than answers. We do know however that factors that increase blood clotting (blood stasis in TCM terms) are involved in some cases and inflammation (heat in TCM terms) in others.

Immune infertility refers to an inability to conceive or maintain a pregnancy because some aspect of the immune system prevents it. It has been proposed that there may be a syndrome in which the presence of various immune factors (natural killer cells, antiphospholipid antibodies, thyroid antibodies, etc.) increase the likelihood of an immune reproductive disorder. Examples are autoimmune conditions such as Grave's disease, Hashimoto's disease, systemic Lupus Erythematosus, antiphospholipid syndrome, scleroderma, psoriasis and Sjogren's syndrome. There are some recent findings which indicate that endometriosis shows some characteristics of an autoimmune disease too.

In many cases there is a history of recurrent miscarriage, but sometimes women are conceiving and losing their embryos before a positive pregnancy test is achieved. We don't know exactly how this happens but cytotoxicity or a suboptimal endometrial environment is the likely cause. In other cases an overactive immune system may attack the gametes themselves, as is the case when excess macrophages phagocytose sperm in the female reproductive tract. Antiphospholipid antibodies or proteins made by genes in inherited conditions called thrombophilias can be responsible for repeated early pregnancy loss because they prevent placental cells from attaching properly. Later stage miscarriages can be caused by clots in the blood vessels of the placenta blocking blood supply. In the case of thyroid autoimmunity, the most common autoimmune condition) pregnancy loss is increased 3-5 times, even if the thyroid is functioning normally.

And while it is interesting to note that research done in China is showing very good results in the management of a number of immune factors which can impair fertility, this research is still in its early days. So once again when we are asked to treat so called

“modern diseases” in our TCM infertility clinics we must fall back on tried and tested TCM diagnoses.

These new Kan formulas bring to bear what modern research can offer combined with traditional Chinese medicine principles. Two pathologies have been implicated most often in autoimmune infertility, blood stasis and heat.

Hence we have [Jade Moon Passage](#) which addresses female immune infertility associated with blood stasis and [Jade Moon Cool](#) which addresses female immune infertility associated with heat.

There will sometimes be some cross over between these two clinical presentations in which case the formulas can be combined. Interestingly low molecular weight Heparin which is the standard treatment for many of these cases, also appears to have dual action, not only dissolving clots but also reducing inflammation.

9 Jade Moon Passage

Immune infertility with blood stasis

Where there is a positive diagnosis of clotting factors (called antiphospholipid antibodies, the two main ones being anticardiolipin antibodies and lupus anticoagulant) or of genetic factors predisposing to making clots (eg factor V Leiden, MTHFR or prothrombin mutations) or of autoimmune conditions we associate with poor placentation (eg systemic Lupus Erythematosus) then [Jade Moon Passage](#) is the formula of choice.

Alternatively we might choose this formula for an patient with infertility if there are signs of blood stasis from a TCM point of view (eg pain, or clotty menstrual flow) or a history of endometriosis or recurrent miscarriage.

Reproductive specialists treat these conditions with blood thinning agents (low molecular weight Heparin). Our approach will be broader than this (although we will make good use of Dan shen and other herbs’s blood thinning ability). The reproductive

immunologists themselves have recognized that pregnancy loss in women diagnosed with clotting factors is not due to the clotting alone. There is also evidence of toxic effects of antibodies on the new embryo as well as unspecified contributions from general immune dysregulation. Hence we need a formula for these patients which, in addition to clearing blood stasis and inflammation, supports the qi and regulates the immune system systemically and at the same time supports Kidney yang. One of the things we consider important at the time of early placental development is warm and flourishing Kidney yang. Interestingly deficiency of Kidney yang and wei qi is thought by some Chinese medicine scholars to contribute to disorders of the immune system.

The formula

Dang Gui (Angelicae sinensis Radix)
Bai shao (Paeoniae Radix alba)
Chuan xiong (Chuanxiong Rhizoma)
Tao ren (Persicae semen)
Hong hua (Carthami Flos)
Dan shen (Salviae miltiorrhizae Radix)
Yi mu cao (Leonuri Herba)
Chi shao (paeoniae radix rubra)
Gui zhi (Cinnamomi Ramulus)
Yin yang huo (Epimedii Herba)
Tu si zi (Cuscutae Semen)
Huang qi (Astragali Radix)
Gan cao (Glycyrrhizae Radix)

Focus of treatment

- Regulate blood, resolve stasis, prevent clotting
- Support blood and qi to nourish endometrium/placenta/embryo
- Support and warm Kidney yang to prevent miscarriage

Formula construction and therapeutic strategy

Jade Moon Passage is based on a modern research formula called Kang Mian Er Hao (Immunity Formula for Helping Pregnancy #2) which promotes circulation of blood to remove stasis.

The majority of the herbs in this formula invigorate blood to prevent clotting and stasis. Some do this by thinning the blood, others by cooling the blood and others by simply promoting blood flow. Many of these herbs have been shown to have anti-inflammatory activity in addition to their function of facilitating blood flow.

Dan Shen is our main herb for promoting circulation and preventing clotting. It is used in a large dose here and is known for its blood thinning and anti-inflammatory effects. This herb is particularly potent at improving microcirculation. It prevents thrombocyte aggregation and clears stasis right down to the tiniest blood vessels and dissolves obstructions at the level we need it most (in the implantation sites of the endometrium and the newly forming placenta).

Tao ren and Hong Hua used in moderate doses assist in promoting blood flow.

Yi mu cao both cools and moves the blood, and Chi shao does this even more strongly.

Chuan xiong unblocks blood vessels by moving qi in the blood level.

Dang gui gently moves the blood and in this formula ensures that no injury to the blood occurs in the presence of all the blood invigorating herbs.

Huang qi, like Dan Shen, is used in a dosage twice as high as any other component of [Jade Moon Passage](#). These two herbs have been the object of much research in treating immune disorders and have been found to have important qualities.

Huang qi, a qi tonic herb, has a marked effect on the immune system, normalising under or over activity. We always need to be mindful of strengthening qi when regulating the immune system. As blood stasis often results from, or is associated with, qi deficiency the combination of Huang qi and Dan Shen in our immune infertility formulas is apt.

Because we are addressing infertility the Kidneys must not be forgotten.

Gui Zhi, Tu Si Zi and Yin Yang huo warm and restore Kidney yang.

Gan cao is known to have immune effects, specifically anti allergic and corticoid like effects.

Herbs; Flavour, nature and site of action

Herbs used to invigorate the Blood

Tao Ren (Persicae semen)

Bitter, neutral. Heart, Liver, Lung and Large Intestines channels.

Hong hua (Carthami Flos)

Acrid, warm. Heart and Liver channels.

Yi mu cao (Leonuri Herba)

Acrid and bitter, slightly cold. Heart, Liver and Bladder.

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver.

Chuan xiong (Chuanxiong Rhizoma)

Acrid, warm. Liver, Gall bladder and Pericardium channels.

Herbs used to cool the Blood and relieve stasis

Chi shao (Paeoniae Radix rubra)

Bitter and sour, slightly cold. Liver and Spleen channels.

Herbs used to warm the channels and invigorate the Blood

Gui zhi (Cinnamomi Ramulus) (from the Exterior releasing category).

Acrid and sweet, warm. Heart, Lung and Bladder.

Herbs used to supplement the Blood

Dang gui (Angelicae sinensis Radix)

Sweet and acrid, warm. Liver Heart and Spleen channels.

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Herbs used to supplement Qi

Huang qi (Astragali Radix)

Sweet, slightly warm. Spleen and Lung channels.

Gan Cao (Glycyrrhizae radix)

Sweet, neutral. Heart, Lung. Spleen and Stomach channels.

Herbs used to supplement the Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Yin yang huo (Epimedii Herba)

Acrid and sweet, warm. Liver and Kidney channels.

Prescribing Jade Moon Passage

Jade Moon Passage can be prescribed to patients who have been diagnosed with clotting factors or an inherited tendency to make blood clots or other autoimmune conditions (associated with blood stasis) which may affect fertility.

Or it may be prescribed to a patient who has a history of endometriosis, adenomyosis or recurrent miscarriage.

Your patient can take this formula during the entire menstrual cycle if she is not actively trying to conceive. After recurrent miscarriages it is often advised to use this sort of formula for several months before attempting conception again. In some patients you may diagnose both blood stagnation and heat in which case [Jade Moon Passage](#) can be combined with [Jade Moon Cool](#), the former being administered in the morning and the latter in the evening.

Then during cycles when your patient is attempting to conceive, she can combine this formula with other Phase formulas. From Day 4 to 14 (or until ovulation) combine with Formula [Jade Moon Phase 2, Under 35](#) or [Jade Moon Phase 2, over 35](#) taking either formula in the morning and the other in the evening.

Then after ovulation combine [Jade Moon Passage](#) with Formula [Jade Moon Phase 4](#) taking [Jade Moon Phase 4](#) in the morning and [Jade Moon Passage](#) in the evening.

We don't need to use the Phase 1 or 3 formulas since the [Jade Moon Passage](#) contains sufficient blood moving herbs already.

While we would usually avoid blood regulating herbs at the time of implantation (ie during Phase 4), where there is a diagnosis of clotting factors they can be of therapeutic benefit. However as soon as a positive pregnancy test is received (and you need to check for this by the time the period is expected) [Jade Moon Passage](#) should be discontinued. [Jade Moon Phase 4](#) can be continued although patent formulas more directed to miscarriage prevention could be advised to your patient.

Taking Chinese herbs at the same time as IVF drugs is not usually recommended.

Defer use of this formula during the acute phase of an infection or attack by an external pathogen.

10 Jade Moon Cool

Immune infertility with heat

Where an infertile patient has received a diagnosis of an autoimmune condition in which inflammation plays a significant role (SLE, rheumatoid arthritis, Sjogrens syndrome, scleroderma, excess natural killer cells, Grave's disease, psoriasis) or if your TCM diagnosis includes heat or damp heat then **Jade Moon Cool** is the formula of choice. Often the recommended pharmaceutical treatment is steroids, but since the use of these are controversial and there are some undesired side effects, herbs which reduce heat and inflammation are a good alternative. Herbs which clear heat and protect yin, (and hence the nutritive juices of the endometrium) have been shown to moderate inappropriate autoimmune effects.

The formula

Sheng di (Rehmanniae Radix)
Shu di (Rehmanniae Radix preparata)
Shan yu rou (Corni Fructus)
Tian dong (Asparagi radix)
Bai shao (Paeoniae Radix alba)
Han lian cao (Eclipta herba)
Tu si zi (Cuscutae Semen)
Dan pi (Moutan Cortex)
Dan shen (Salviae miltiorrhizae Radix)
Huang qi (Astragali Radix)
Chao Huang qin (Scutellariae radix)
Huang bai (Phellodendri cortex)
Gan cao (Glycyrrhizae Radix)

Focus of treatment

- Clear heat to reduce inflammation
- Reinforce yin to prevent heat damaging fluids and blood
- Support Kidneys to preserve fertility

Formula construction and therapeutic strategy

Jade Moon Cool is a modified version of the research formula Kang Mian Yi hao (Immunity Formula for Helping Pregnancy #1).

Research has shown that herbs that nourish yin and clear heat can moderate overactive immune reactions. Hence we choose as a basis for **Jade Moon Cool** herbs which cool and consolidate the Yin such as Sheng di, Shu di, Shan Zhu yu, Han Lian cao, Tian Dong and Bai Shao.

Sheng di (often used in combination with Shu di) is well known for its anti-inflammatory effects and is included in many formulas for autoimmune disorders. Sheng di is very cooling and moistening and clears heat from the blood as it nourishes the yin. Shu di fortifies the yin strongly.

Shan Zhu yu reinforces the action of Shu Di, in nourishing the Kidney and Liver yin.

Han Lian Cao is a pure strong yin tonic of Liver and Kidney which clears heat.

Tian Dong is very cold and strongly clears heat and moistens tissues which have been dried out.

Bai shao is slightly cold and nourishes Liver and Spleen yin.

Inflammation is often associated with some sort of exudate, something we usually describe as damp heat in Chinese medicine terms. Hence the use of Huang qin and Huang Bai which clear damp heat. Huang Qin clears heat from the womb (and is often used to prevent miscarriage caused by inflammation). We use the prepared form of Huang qin in this formula so it is not quite so cold and bitter. Huang Bai clears heat and damp especially from the lower body.

Mu dan pi cools heat from deficiency or excess and gently invigorates the blood. Mu Dan Pi along with the other blood regulating herb in **Jade Moon Cool**, Dan Shen, has been shown to demonstrate anti – inflammatory activity, reducing exudate and decreasing permeability of capillaries.

Dan shen, used here in a large dose, is best known for its ability to promote circulation in the capillary beds. It clears heat in the nutritive level and is used widely to treat autoimmune conditions.

Huang qi is also used in a large dose in this formula. It has been shown to normalize immune responses in many situations. It also promotes the function of Dan Shen. Huang qi inhibits the production of pro – inflammatory cytokines by macrophages.

Gan cao is well known for its anti-inflammatory effects. It relieves inflammation, and is thought to enhance the effectiveness of formulas. The fresh form of the root drains and moderates fire gently.

To direct this formula toward treatment of infertility, we add Tu Si zi to support Kidney yang, Huang qi aiding in this action. Tu Si zi, which strengthens both Kidney yin and yang, is an important herb for preventing miscarriage.

Herbs, Flavour, nature and site of action

Herbs used to supplement the Yin

Tian dong (Asparagi radix)

Sweet and bitter, very cold. Lung and Kidney channels.

Han lian cao (Eclipta herba)

Sweet and sour, cold. Liver and Kidney channels.

Herbs used to clear Heat from the Blood

Dan pi (Moutan Cortex)

Bitter and acrid, cool. Heart, Liver and Kidney channels.

Sheng di (Rehmanniae Radix)

Sweet and bitter, cold. Heart, Liver and Kidney channels.

Herbs used to supplement the Blood

Bai Shao (Paeoniae Radix alba)

Bitter and sour, slightly cold. Liver and Spleen channels.

Shu di (Rehmanniae Radix preparata)

Sweet, slightly warm. Liver and Kidney channels.

Herbs used to clear Damp and Heat

Chao Huang qin (Scutellariae radix)

Bitter, cold. Lung, Gall bladder, Stomach and Large intestine channels.

Huang bai (Phellodendri cortex)

Bitter, cold. Kidney, Bladder and Large intestine channels.

Herbs used to invigorate the Blood

Dan shen (Salviae miltiorrhizae Radix)

Bitter, slightly cold. Heart, Pericardium and Liver.

Herbs used to supplement Liver and Kidney

Shan yu rou (Corni Fructus) (from the Astringing category)

Sour and astringent, slightly warm. Liver and Kidney channels.

Herbs used to supplement the Qi

Huang qi (Astragali Radix)

Sweet, slightly warm. Spleen and Lung channels.

Gan Cao (Glycyrrhizae radix)

Sweet, neutral. Heart, Lung. Spleen and Stomach channels.

Herbs to supplement Kidney Yang

Tu si zi (Cuscutae Semen)

Acrid and sweet, neutral. Liver and Kidney channels.

Prescribing Jade Moon Cool

Patients who have been diagnosed with a systemic autoimmune disorder, and who have had difficulty becoming pregnant or staying pregnant may be prescribed **Jade Moon Cool**, particularly if there are signs of heat. This includes patients with a diagnosis of SLE, Graves disease, endometriosis, scleroderma, Shogrens syndrome or rheumatoid arthritis. Discovery of inappropriate numbers of immune factors such as Natural Killer cells in the blood or uterus would also indicate the use of this formula.

If there has been a history of miscarriage, related to autoimmune factors then taking **Jade Moon Cool** for a few months before attempting conception is advised. Sometimes there will be concurrent signs of blood stasis and **Jade Moon Cool** can be combined with **Jade Moon Passage**, taking the latter in the morning and the former in the evening.

If your patient is trying to conceive **Jade Moon Cool** can be combined with the Jade Moon Phase formulas. Jade Moon Phase 1 – 4 formulas can be taken each day in the morning according to the time of the cycle, and **Jade Moon Cool** can be taken each

evening.

As with the previous formula there are some herbs in [Jade Moon Cool](#) that we would normally avoid in Phase 4 in cycles when your patient is actively trying to conceive, such as blood invigorating herbs or cooling herbs. However in the case of inflammation in the uterus these herbs can be helpful at the time of implantation.

[Jade Moon Cool](#) as its name suggests, is quite a cooling formula and if there is any sign of Spleen weakness (loose stools, bloating) then [Digest Aid](#) or [Prosperous Farmer](#) can be added to support the Spleen qi and help digestion.

Defer use of this formula during the acute phase of an infection or attack by an external pathogen.

Taking Chinese herbs at the same time as IVF drugs is not usually recommended.
