

PATIENT NAME GOES HERE DOB: 00/00/1900

O&P LETTER HEAD GOES HERE

CP NAME, CREDENTIALS
O&P/FACILITY NAME GOES HERE
ADDRESS
PHONE & FAX

DATE GOES HERE

Letter of Medical Necessity

Patient: John Doe
7777 Sunshine Blvd
Somewhere, CA 90805
Home: 123-456-7890
Cell: 000-000-0000
DOB: 00/00/1845

Insurer: Insurance
12345 S. Village Oaks Dr.
SOMEWHERE CA 00000
Case Manager: NAME GOES HERE
Direct: 000-000-0000
FAX: 000-000-0000
Email: EMAIL ADDRESS GOES HERE
Claim#: 0000-00-0000
DOI: 00/00/1900

Prosthetist: NAME GOES HERE, CPO
FACILITY NAME HERE
1234 HOLLYWOOD Blvd.
SOMEWHERE, CA 12345
Office: XXX-XXX-XXXX
Fax: XXX-XXX-XXXX
Email: EMAIL ADDRESS GOES HERE
Website: WEB ADDRESS HERE

Physician: PHYSICIAN NAME, MD
PRACTICE NAME
ADDRESS
Long Beach CA 90807
NPI#: XXXXXXXXX
Phone: 000-000-0000
Fax: 000-000-0000

To whom it may concern:

This letter documents medical necessity of a Bebionic Hand and to fulfill the prescription for upper-limb prosthesis for the patient, _____. Medical history and treatment pathways are as follows:

A. (patient name)'s BACKGROUND

_____ is a _____ year old (male/female). Patient is married with _____ children ages _____. Patient had his/her left/right arm amputated on _____ due to _____.

- Explain what happened to cause the amputation.
- Describe the level of amputation.
- Describe missing joints and bones.
- Describe other medical conditions patient is experiencing as a result of the amputation.

B. ACTIVITIES OF DAILY LIVING BEFORE AND AFTER AMPUTATION

Work:

Patient, currently works as a _____ and hopes to return to the

- Work force (in the same position)
- Or transition to a different position (i.e. office environment)
- Describe what it will take to get to work (e.g. getting ready in morning, transportation, getting into building, etc.)
- Describe work environment and activities patient will perform at work
- Describe equipment that will be operated

ADL:

Patient would like to safely perform activities of daily living; "the things we normally do in daily living including any daily activity we perform for self-care (i.e. feeding ourselves, bathing, dressing, grooming), work, homemaking, and leisure." Patient would like the prosthesis to allow him/her to perform his/her normal activities of daily living (i.e. butter his toast, open jars, cutting his steak with a knife, hang a sweater, carry a briefcase, put away groceries, hold a bag with one hand and use the other hand simultaneously, self-care and hygiene to name a few.

Family:

Patient is also anxious to participate in functions with his/her family. As Patient has _____ children he/she wants to be able to keep up with their activities. Reported activities are _____.

Exercise and Leisure Activities:

Patient would also like to return to a variety of exercise and leisure activities. Reported interests are _____.

Home Maintenance, Yardwork, Hobbies:

Describe activities that patient wants to get back to and any tools or equipment he/she desires to operate keeping in mind the functions bebionic allows.

C. PROSTHETIC PRESCRIPTION

Patient's prosthesis will be fabricated and assembled as follows:

- Positive model of patient
- Trial prosthesis (describe if applicable)
- Definitive external powered below elbow prosthesis, describe (e.g. custom medical grade silicone inner socket, embedded laminated frame, electrodes, cables, battery, charger)
- Bebionic Hand and Glove
- Wrist Type
- Quick Disconnect
- Greifer (if applicable)

D. MEDICAL NECESSITY FOR MYOELECTRIC

Myosite testing: Patient was tested and has sufficient neurological, myocutaneous, and cognitive function to operate the myoelectric prosthesis effectively as prescribed. Patient retains sufficient microvolt threshold in the residual limb to allow proper function of the prosthesis. During the assessment at our office a myoelectric trial was conducted and ____ strong myosites were located. Patient demonstrated that he/she could isolate individually the myosites and control the Bebionic hand (i.e. rotate the electric wrist and open and close the Bebionic hand).

Reasons why a cable driven/body powered prosthesis cannot be used: Due to _____ the prescription of a right myoelectric prosthesis will best meet patient's functional needs.

- *Physical condition that might limit the range of motion necessary for generating sufficient excursion for use of a cable driven/body powered prosthesis.*
- *Lack of strength to generate the force necessary for operating a cable driven/body powered prosthesis.*
- *Physical condition that operating a harness could worsen/exacerbate (e.g. rotator cuff injury, nerve impingement, skin issues, delicate tissue, scarring).*
- *Condition that limits the amount of force the patient is able to put through prosthesis to operate a cable driven terminal device (e.g. prominent bones, adherent scar tissue, pain, neuromas, etc.)*
- *The function of a cable driven/body powered prosthesis insufficient for completing ADL's, vocational tasks and leisure activities.*
 - a. *Patient requires a larger functional envelope*
 - b. *Patient requires enhanced dexterity/functionality of the amputated side because of properties of the tasks themselves or because increased hand prosthetic function is required to alleviate symptoms of overuse (i.e. patient would benefit from a multi articulating hand that provides improved grasp and dexterity including unique grip patterns with less force/effort and can be used for more activities and take more strain off of the sound limb).*
- *The patient is bilateral and requires independent operation of prosthesis*

E. COMORBIDITIES

Patient is free of any comorbidities that could interfere with maintaining function of the prosthesis being ordered (e.g neuromuscular disease, etc.).

F. PRESCRIPTION

The hand is one of the most important elements of our self-image, second only to the face. Our hands are a tremendous part of how we present ourselves to others. In addition to interacting with the environment in so many functional ways, our hands are a significant part of our psychological and social selves, and are a vital element in our sense of feeling whole (Doug Smith, 2007). Our hands and fingers provide numerous gripping patterns (thirty three have been categorized). Standard myoelectric hands allow only two functions (power grip and precision grip). The bebionic includes 14 grip patterns and hand positions which enable the user to perform a huge number of everyday activities with ease. The bebionic hand also features a quick disconnect unit that can quickly be removed and switched with a Greifer.

The bebionic's proportional speed and grip force provides precision control when performing delicate tasks, allowing the user to do things like pick up an egg or hold a polystyrene cup. Its auto grip feature means no more accidents, as bebionic automatically senses when a gripped item is slipping and adjusts the grip to secure it. The bebionic's multifunctional design and advanced materials make it strong enough to handle up to 45kg – so the user can confidently use the hand to carry heavy objects, and push up from a seated position. Soft finger pads and a wide thumb profile maximize the surface area and enhances grip.

The mobility of multiple fingers is very important to patients, and not just for emotional reasons. The needs and requirements of people who rely on a prosthetic arm have changed – especially in the increasingly digital working world and recreational environment. Bebionic is a commercial prosthetic hand designed to enable amputees to perform everyday activities, such as eating, drinking, writing, typing, turning a key in a lock and picking up small objects. Bebionic is comfortable, precise and intuitive for patients, transforming the lives and abilities of amputees around the world – from helping them perform simple tasks like tying shoelaces to giving them back their control and their pride. Following are the 14 selectable grip functions.

1. **Active Index grip** enables the user to effectively operate home and garden appliances with trigger mechanisms, like handheld sprays, hairdryers and power tools. With active index grip, the user's hand grips the object, while maintaining control over the index finger to operate the trigger. The active index grip is the ideal hand position for using a keyboard. Objects are grasped and Held with the thumb, middle, ring and little fingers, and the index finger subsequently bends. The user can then control and position the index finger independently.



2. **Column grip** allows the user to operate levers and firmly press buttons. The column grip can be used when driving, to use car indicators, at work to operate lifts, or at home to switch on appliances or button a jacket. The user can push objects or operate larger buttons and switches with this grip. We also recommend using it when dressing since the thumb will not get caught in clothing as easily. With the column grip, the thumb is moved from the lateral position towards the palm. The fingers then close over the thumb, making a sort of fist.



3. **Finger Adduction grip** is great for picking up and holding thin objects. When eating, the grip can be used to hold cutlery or it can be used when brushing teeth. Finger adduction can also be used to pick up papers, leaflets and magazines. The fingers of the bionic hand move together naturally as they close. This allows the user to more securely grip thin objects, such as cutlery or magazines, between the fingers for a uniquely confident grasp. Finger adduction performs especially well with the hand closed. It can also be used together with the key grip and pinch grip.



4. **Finger Point grip** allows the user to perform tasks like pressing small or intricate buttons, such as a doorbell. When using a computer finger point allows the user to operate the keyboard and touch screen. The hand can be moved to the finger point position when the thumb is in the lateral position. The middle, ring and little fingers close against the palm and the thumb moves against the middle finger.



5. **Hook grip** provides the perfect solution. Secure and versatile, hook grip enables the user to carry everything from briefcases and handbags to Heavy shopping bags.



6. **Key grip** is ideal for reading a magazine, using a spoon or for holding a thin, flat object such as a plate, a credit card or a key. It provides precise, accurate control, and enables the user to complete intricate tasks such as unlocking a door, folding a towel, or carrying a tray. The fingers close part way when the thumb is in the lateral position. The thumb then closes onto the side of the index finger. The user can then raise and lower the thumb position without moving the other four fingers. This allows for easy release, hold, or reposition of the object being gripped.



7. **Mouse Grip** Whether working in the office, browsing the internet, or playing video games at home, the mouse grip is ideal. The mouse grip lets the user operate a computer mouse. The thumb and little finger close to hold the sides of the mouse, with the middle and ring fingers providing additional stability. The index finger closes on to the mouse button and then backs off to provide the button press. The user can achieve a mouse click with a close signal to the hand and release the mouse with an open signal.



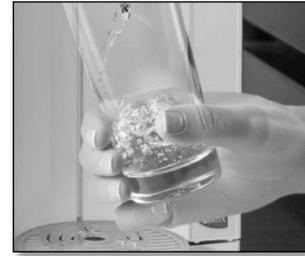
8. **Open palm grip** provides an effective way of carrying bowls or plates naturally and safely in the palm of the Bionic hand. The user can fully open the hand to provide a flat palm when the thumb is in the lateral position.



9. **Pinch grip** allows the thumb and index finger come together to provide a versatile, useful way to pick up and maneuver a wide range of small objects, including car keys, coins, lids and pens. The pinch grip is particularly suitable for manipulating objects precisely.



10. Flexible Power grip provides just the right amount of grip to suit any situation, whether shaking someone's hand, throwing a ball, using home and garden utensils or eating a piece of fruit. This grip pattern enables the user to hold round or cylindrical objects more easily and, above all, more securely.



11. Precision Closed grip provides a quick, reliable method of picking up and moving small, fiddly objects such as a coin or tissue. With precision closed grip, the index finger grips against the thumb while the rest of the fingers close onto the palm. This grip is similar to the precision open grip, but is particularly suitable for situations where extended fingers would get in the way – for instance when working at a desk. The middle, ring and little fingers are bent first and close into the palm; the thumb then moves to the midpoint of its movement range and pauses there. After that, the user has full control of the active index grip.



12. Precision open grip offers another useful way to pick up and manipulate small objects quickly and accurately. With precision open grip, the index finger grips against the thumb while the middle, ring and little fingers remain open. With precision open grip, the user can pick up and manipulate small objects with the thumb in opposition. Two activities the user would learn to do with this grip is open a candy bar wrapper and close a zipper. The index finger meets the static thumb in this case. When a close signal is applied, the thumb moves to the midpoint of its range and pauses there. The index finger is then active and under the user's control while the middle, ring and little fingers remain extended.



13. Relaxed hand position helps to give a natural and lifelike appearance. In the relaxed hand position, the thumb is positioned slightly towards the palm in the lateral position. The other fingers are slightly bent. By applying a further signal, the hand is moved into the hook grip for carrying objects.



14. Tripod grip is used to pick up, hold and manipulate a variety of everyday objects including car keys, coins, jar lids and pens. This grip can be used tie shoe laces and to open/lift a lid. As soon as the thumb is in opposition, the user can close the hand in the tripod grip so the thumb, index and middle fingers meet. The ring and little fingers close.



G. DAILY ACTIVITIES

State activities that patient would like to get back to from item B (above)

H. WHY THE PRESCRIBED COMPONENTS ARE SUITABLE FOR THIS PATIENT

The bionic hand's selectable grips will allow patient to do daily activities at home and in the community. Patient will be able to operate appliances with levers and push buttons; pick-up, carry, move/hold various sizes of items; operate a computer keyboard, mouse, or touchscreen for work or entertainment; carry bags/items with handles; use a key credit card, write a check, tie shoes, and shake hands. The electric Greifer will allow Patient to do heavier tasks in the home, yard and workshop.

10. RECOMMENDATION

In summary, a custom fabricated below elbow external-powered prosthesis with (describe, e.g. bionic Hand, Electric Wrist Rotator, and Electric Greifer) have been selected for Patient as the best componentry that meets his/her needs as a below-elbow amputee. Not only will this prosthesis restore hand function allowing him/her to get back to daily activities and work, it may also improve his/her health-related quality of life, body image and balance issues (reducing strain on _____), which in turn should reduce reported _____ pain and any compensatory movements patient has developed during this period of time without a prosthesis.

Please contact me if additional information is required or if I can be of further assistance.

Sincerely,

PHYSICIAN NAME, MD

Date

PROSTHETIST NAME, CPO

Date